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THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

ESTABLISHED IN 1872

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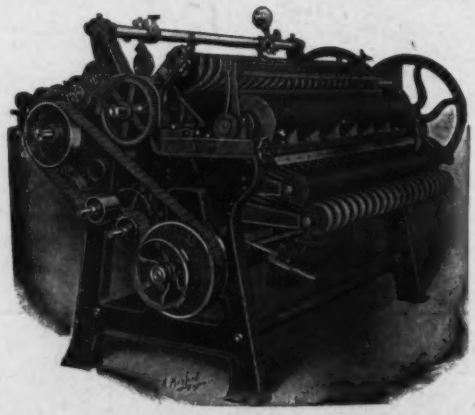
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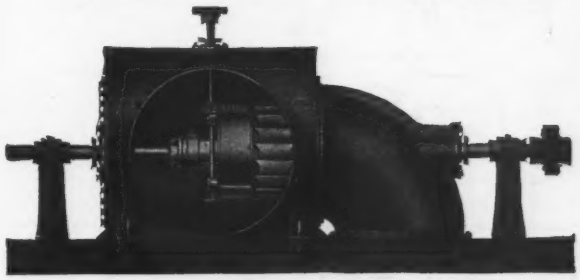

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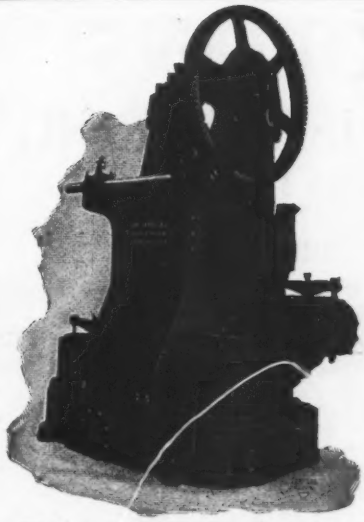

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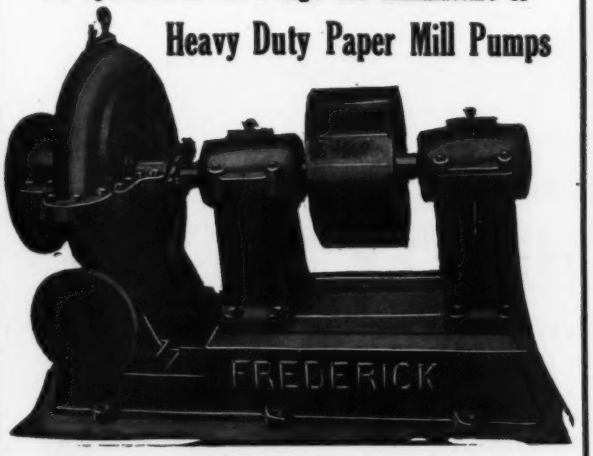

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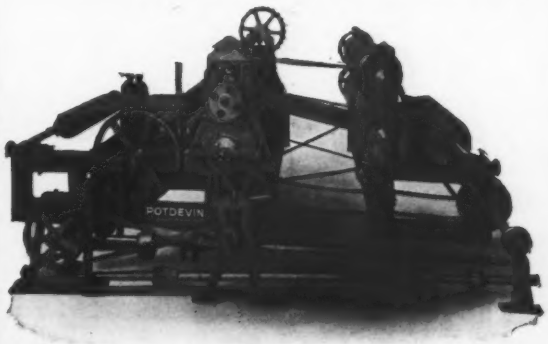

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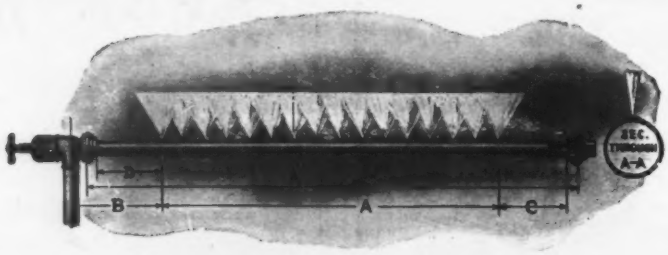

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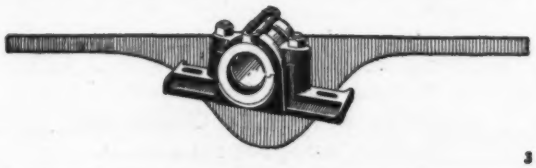

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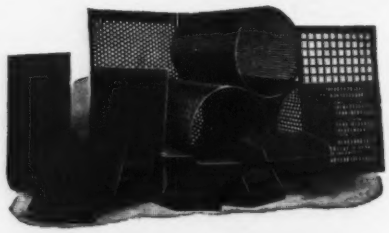

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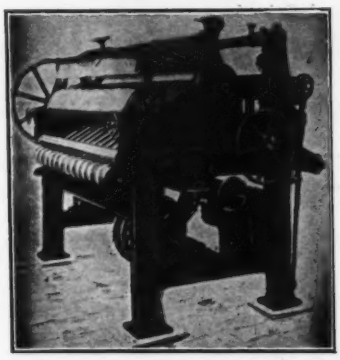

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THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY

FIFTY-FIRST YEAR

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SUPERINTENDENTS FORM BOARD DIV. AT CHICAGO

Claude Nicely, of the La Salle Paper Company, South Bend, Ind., Is Elected Chairman of the Western Board Division of the American Pulp and Paper Mill Superintendents' Association Organized Saturday at the Congress Hotel—Ed. T. A. Coughlin, Acting Chairman of the Executive Committee of the National Association, and Others Make Inspiring Addresses

CHICAGO, November 25, 1922.—With an attendance of thirty, the initial meeting of the Western Board Division of the American Pulp and Paper Mills Superintendents' Association was held today in the English Room of the Congress Hotel, this city. It proved to be an interesting and beneficial day for the mill superintendents. From 9 o'clock this morning until after the usual bed-time hour, attention was centered on problems of the industry and methods of solving them. Morning and afternoon sessions, an evening banquet and an inspection trip sandwiched in between the afternoon session and the banquet made it a busy day. The earnestness displayed by the men in the formation of this new division and the free and frank manner in which they took part in the various discussions was striking evidence of the fact that this new venture is bound to be successful. Three papers, delivered by able men at the afternoon session, were of exceptional interest and elicited numerous pertinent questions, all of which were cheerfully answered by the speakers or some superintendent in the audience who had previously had experience with the problem under discussion.

Mr. Coughlin Calls Morning Session to Order

The morning session was called to order by Ed. T. A. Coughlin, acting chairman of the executive committee of the National Association, who spoke on the objects and benefits of association work in general and of the possible results of a well-organized Board Division in this territory. His remarks, in part, were as follows:

"I am pleased at the turnout this morning. We can't expect a big gathering at these first meetings. All sections of the country have started out with few in numbers.

"Our association is based on the principle of co-operation. The exchange of information among members will be valuable to all of us if we will only take part in the discussions. You learn as you share your knowledge and experiences with others."

Mr. Coughlin then referred to the division organized at Holyoke last week, stating that he was surprised and pleased at the reception given the association and the district idea at that time. "The method we hope to pursue in attempting to solve problems of the industry is bound to bring results," he added. "In addition to discussing questions in the local meeting in which they originate, they will be passed on to other districts for discussion. This is especially essential in cases where questions arise that cannot be solved in the local district meetings. By presenting them in various parts of the country, a solution is almost certain to be found. This will be sent to the superintendent making the inquiry, thereby helping him and calling the attention of the subject matter to the various members who are liable to be confronted with the same problem at a later date.

"In some sections of the country, these meetings are held every month. This is the case in the Kalamazoo and Ohio districts. Speakers at these meetings talk on specialized subjects and after each paper, the talk is discussed and the different angles of thought are presented. The subjects that may be advantageously discussed at these meetings is unlimited, although you will be surprised at the amount of ground you can cover in a short time. Representative subjects are methods of handling chemicals and pulp, technical control and a host of other important matters."

CLAUDE NICELY, CHAIRMAN, WESTERN BOARD DIVISION, AMERICAN PULP AND PAPER MILLS SUPERINTENDENTS' ASSOCIATION

Nominating Committee Appointed

With the consent of the assembly, the chairman then appointed a nominating committee to prepare and submit a proposed list of officers. This committee consisted of Messrs. T. L. Peterson, chairman, C. E. Nicely and Lee Wilson.

While the committee adjourned to prepare its list, the meeting was thrown open for a general discussion of the benefits of associated effort in discussing and solving problems of mill superintendents. Mr. Coughlin spoke of the good work done in the Northeastern and Northern New York division.

Upon being called upon to discuss "Our Association and Its Accomplishment," Henry Burt spoke of the poor attendance at the first meeting of the Wisconsin division at Appleton and the result of the free use of automobiles and the long distance telephone in rounding up a splendid showing at a session on the evening of that same day. He said: "From that time on, the organization seems to have made good progress and we have received a lot of good from these meetings. I have secured information at superintendents' meetings that I could not have secured in any other way. You learn how to be of more and greater assistance to the consumer of boxes and to

the mills you represent. The only place you can get this information is at the meetings of superintendents."

Joe Hodgins spoke of the benefits received by the superintendents at the meeting held at Holyoke last week. He referred especially to a paper by Mr. Hackett on the "Curling of Paper" and to the discussion it brought out. Several men at that meeting expressed themselves as having received some real information on the subject which would help them in their plants, according to Mr. Hodgins.

Mr. Shartle Speaks on Association Benefits

C. W. Shartle referred to the advantages of acquaintanceships made at this meeting. Other points brought out by speakers at this round table talk on association benefits are: The speaker is naturally the star of the program at these meetings, but the real results are brought about by the question box idea adopted by the association. This consists of the passing of blank pieces of paper at the beginning of each meeting with a request that sunperintendents write out questions to which they would like to have answers made, either signing their names or turning them in without signatures. The territory included in this district comprises Illinois, Indiana, Iowa and Kansas. There is but one paid officer in the association—the secretary. Others work in behalf of the organization for the good it may bring the industry.

The New Officers

At this time the nominating committee returned and placed in nomination the following members:

Chairman—Claude Nicely, La Salle Paper Company, South Bend, Ind.

First Vice Chairman—Lee Wilson, Morris Paper Mills, Morris, Ill.

Second Vice Chairman—T. L. Peterson, Mt. Vernon Strawboard Company. Mt. Vernon, Ind.

Secretary and Treasurer—Daniel J. Gallery, Chicago Mill and Lumber Company, Chicago.

Advisory Committee—Bernard Benson, Williams Gray Company, Chicago; J. P. Furlong, Rubberoid Company, Joliet, Ill.; R. F. Knott, Crescent Paper Company, Marseilles, Ill.; A. McPhillips, R. J. Dowd Knife Works, Beloit, Wis.

On motion of J. W. Harbrecht, the secretary was instructed to cast a unanimous ballot for these nominees and they were elected to serve the district for the ensuing year.

Mr. Nicely Asks for Co-operation

The newly elected officers were called on for remarks and responded promptly. Mr. Nicely, the chairman, promised to give the organization what service he could and asked for the co-operation of the other members. He referred to the co-operation that existed among the first paper makers and suggested emulation of the example they set, using the following language:

"Paper was first made by a wasp. A wasp never lives alone. He is never a hermit. He is always a social bug. He is in constant social relations with his fellows. It was the wasp that produced the first sheet of paper. This world moves in cycles, either in a large way or in a small way. Some of you are old in years; others of us are just coming into the business. The industry will prosper and we will all benefit from getting together—mingling and listening. The good fellowship we receive from knowing each other will pay us in more ways than one. From a monetary standpoint, it pays us to know each other. By rubbing shoulders and exchanging ideas, we learn. The superintendent is the man who makes the paper and the man who makes the money. If he learns how to overcome even one difficult problem, he will be making money for the firm he represents. If I can give, I know that I will receive. I trust you will all help make this organization a success."

Mr. Wilson, the newly elected first vice chairman, spoke of the excellent manner in which the superintendents present had participated in the various discussions that had been helpful to others present, and added: "Talks such as those given us by Mr. Nicely and the others present are going to make our association a success. I predict that our division is going to be one of the best of all."

Mr. Peterson, second vice chairman, explained that the board business was new to him and therefore, for a while at least, he would have to be in the class that receives without giving much, but that when the opportunity presented itself, he would gladly give of his services and time to help the organization.

Remarks by Other Officers

Mr. Gallery, secretary and treasurer, stated that he was more than pleased to do everything in his power to furnish information and notices to members and to assist in developing the organization.

Upon suggestion of Mr. Burt that small dues be levied to defray the expense of the secretary's office, Mr. Nicely, who had not yet taken the chair, volunteered to stand the expenses of the division for the first year and moved that the chairman pay the necessary cost of the secretary's office for one year. Amid much laughter, the motion was quickly seconded and unanimously carried, much to the delight of the new chairman.

R. F. Knott, a new man in the board business, was an interested member, stating that he was "trying to pick up crumbs of knowledge." He said: "The spirit of this meeting and this association of getting out of it what he can is the reason I came in. When I have something of benefit to the members, I will be glad to chirp."

Before adjourning for lunch, an attempt was made by several of the members present to get Miss P. C. Barrett, the national secretary, to make a speech. Her modesty overcame their pleadings and the assembly decided that here is one woman who doesn't talk.

At one o'clock, all present retired to the French Room, across the hall, for a buffet lunch. During the luncheon hour, men with kindred problems seated themselves together and either re-hashed the talks of the morning or opened up new subjects for mutual discussion and benefit.

Mr. Nicely Presides at Afternoon Session

At the opening of the afternoon session, Mr. Coughlin was still in the chair and remained until the membership had decided on the frequency of meetings. No definite action was taken with reference to regular meetings except that it was generally agreed that they be held about four times a year. On motion of Mr. Nicely it was voted to hold the next meeting on the second Saturday in February, 1923.

The new chairman was then introduced. Mr. Nicely presided during the remainder of the afternoon and served as toastmaster at the banquet in the evening.

Program of Afternoon Meeting

The afternoon was devoted to a discussion of various subjects. The topics and the speakers were:

"Influence of Moisture on Tests of Container Board," Sidney D. Wells, Forest Products Laboratory, Madison, Wis.

"Chemical Control in the Board Mill," K. I. Herman, president of the K. I. Herman Chemical Corporation, Chicago.

"Beating," Charles W. Shartle, president of Shartle Brothers Machine Company, Middletown, Ohio.

In his paper, Mr. Wells referred to the marvelous growth and progress of fiber board from an annual production of 125,000 tons in 1907 to 1,333,000 tons in 1920. In the same time the use of fiber boxes has grown from 10 per cent of all boxes used to 60 per cent of all boxes used.

The remaining papers are given in full on succeeding pages.

The Banquet

Chairman Nicely served as toastmaster at the banquet held in the Green Room of the Congress Hotel Saturday evening. Talks were made by the chairman and by Messrs. Massey, Benson, Benjamin Franklin, of the William H. Hall Printing Company, Knott, Burt, Coughlin, Kerr and Post.

At this affair the future welfare of the organization was discussed and predictions were made that nothing but success was in store.

Those Who Attended

The register showed the following attendance:
Oliver Buswell, Chicago.
B. W. Bennett, Dilt's Machine Company, Fulton, N. Y.
W. H. Burns, Valley Iron Works, Appleton, Wis.
Henry Burt, Downing Box Company, Milwaukee, Wis.
J. R. Carter, J. G. Cherry Company, Tana, Ia.
Ed T. A. Coughlin, Allied Paper Mills, Kalamazoo, Mich.
G. A. Dowd, Dowd Knife Works, Beloit, Wis.
W. F. Ebbing, Ohio Knife Company, Cincinnati, Ohio.
A. E. Emerson, Vacuum Oil Company, Chicago, Ill.
Frank Eilers, Kalamazoo, Mich.
J. P. Furlong, Rubberoid Company, Joliet, Ill.
Daniel J. Gallery, Chicago Mill & Lumber Company, Chicago, Ill.
J. W. Harbrecht, Hinde & Dauch Paper Company, Sandusky, Ohio.
Joe Hodgins, New York.
R. F. Knott, Crescent Paper Company, Marseilles, Ill.
F. E. Kerr, American Strawboard Company, Noblesville, Ind.
Herbert Lippett, International Paper Company, New York.
Mr. Middleton, Chicago, Ill.
A. McPhillips, R. J. Dowd Knife Works, Beloit, Wis.
G. A. Olsen, PAPER TRADE JOURNAL, Chicago, Ill.
T. L. Peterson, Mt. Vernon Strawboard Company, Mt. Vernon, Ill.
L. D. Post, New York.
J. W. Richardson, Crescent Paper Company, Marseilles, Ill.
C. W. Shartle, Shartle Brothers Machine Company, Middleton, Ohio.
H. K. Vinton, PAPER TRADE JOURNAL, Chicago, Ill.
Sidney Wells, Forest Products Laboratory, Madison, Wis.
Lee Wilson, Morris Paper Mills, Morris, Ill.
Bernard Benson, Williams-Gray Company, Chicago.
W. A. Yule, F. C. Huyck & Sons, Albany, N. Y.
Claude E. Nicely, LaSalle Paper Company, South Bend, Ind.
P. J. Massey, Chicago, Ill.
P. C. Barrett, secretary, American Pulp and Paper Mill Superintendents' Association, Kalamazoo, Mich.

CHEMICAL CONTROL IN THE BOARD MILL*

BY K. I. HERMAN, PRESIDENT, K. I. HERMAN CHEMICAL CORP., CHICAGO

The term "Chemical Control" sounds like something very serious and severe. Mr. Nicely ridicules this matter of charts and records a little. He doesn't mean that, because he uses charts and records every day.

Supposing, Mr. Nicely, that in your office you and the office boy made out the invoices and once a month scratched a few marks on a piece of paper and said, "We made so much money this month." How long would you stay in business?

You have a technical man engaged to do that for you. You call him a bookkeeper; he puts down a vast number of figures, and hands you a chart. You call it a trial balance. I call it a chart. Another thing a man in Mr. Nicely's position is apt to overlook is the importance of the fellow who doesn't sit up in the office and count the money. The money is not made in the office or out of charts; it is made in the mill by the workmen, it is made by the man who buys the raw material and the man who uses the raw material. It is not made by the man who sells the raw material.

Now, the man who uses the raw material comes under the superintendent, and the superintendent, if he is the right kind of superintendent, is the most important man in the board mill, not the president.

Furthermore, if the superintendent has a man working for him who can understand and read these charts better than he can he is not going to lose his job, providing he makes this man who can read the charts give him the digested result of the charts, and that is all the superintendent needs.

The Trouble with the Records

The great trouble with most records like your watchman's clock record or your flowmeter charts or thermometer charts or any other charts is that they come out week after week pretty much alike and it becomes a routine matter to put down your O. K. and send them in to the general office. Probably the general office manager looks at the bunch of thirty casually, puts his O. K. on them and they go out to the files. You have a fine bunch of records.

Pretty soon you have a fire and they are burned up. You say then that there is not much lost, a lot of valuable records are gone.

Now, to get those records of value to you you should have some one who can read them, and if Mr. Nicely had some one who could read them and put the digested results on his desk he would not lose his job.

In a paper mill or a board mill or any other line of industry that is using large quantities of raw material, if you don't know what you are buying you don't know whether you are making money or not. I should rather have said, instead of "chemical control," "technical information" on the thing you are doing.

To get chemical control in a board mill is not a matter of having efficiency experts come in and tell you how to run it. It is a matter of engaging a chemical engineer, preferably a young man, right out of college. Put him under the direct employ of the superintendent and let the superintendent tell him what he wants, and let your chemist get that. Generally, your efficiency expert comes into the paper mill and steps around briskly, makes a lot of motions, tells you where you are wrong and what to do—working hind side before. Your experts should not run the mill. Your superintendent should have the use of the experts.

When you go to build a house you engage an architect. That architect does not tell you how many rooms you want. You tell him you want a six-room house, such-and-such a type. You say, "Interpret that in technical language, and we will pay you five per cent, but you are not telling me what kind of a house I want."

Now, some of you gentlemen were at Kalamazoo when I spoke last summer, and some were not. I imagine not many of you were there for only one or two left the room.

Changes After the Great War

I want to repeat one thought. After every great war there comes a great upheaval of the human mind. This is exhibited in a great many ways. Atrocious crimes are committed, wonderful paintings are painted, great inventions are made. A general change in the method of living takes place.

After the last great upheaval, fifty years ago, at the time of the Civil War and the Franco-Prussian War, the upheaval took a turn towards mechanical development, and the fifty years following those wars brought mechanical development to a state of perfection, so that today when anyone starts on the improvement of anything we think in terms of mechanics. You would not think of doing anything by hand any more.

The last great war has caused such a tremendous upheaval that the patent office is running fifty per cent higher than it ever ran, and all the way through you will find the human mind intensely active. The result of this war is going to be the great development in chemistry. There are great forces working.

Must Get in Line or be Left Behind

That is a repetition of what I said at Kalamazoo. I said further

*Delivered at the meeting of the Western Board Division of the American Pulp and Paper Mill Superintendents' Association, Chicago, Nov. 25, 1922.

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that the paper or board mill that does not get in line with that procession is going to be left behind. That sounds hard, but it is not. The practical method of chemical control of your mill is this: In the board mill you have got several items in which you make large purchases, coal, pulp, paper stock of various kinds, straw, etc. When you buy a thousand tons of pulp, and the distinguished gentleman in the office who does not care for records looks at his records and sees that you only produced twenty-five when you should have produced twenty-five hundred, and comes out and says, "What are you doing with our pulp? You put too much pulp into the beaters." You bought a pound of plup and you never got it. You thought you did. You got a certain amount of water, you know that. You know how much water there is in it, but you don't know how much loading you had. I want to tell you you are buying a lot of it, and don't know it. Your chemical engineer with his little laboratory which only costs five or six hundred dollars to equip (you can equip a peach of a laboratory for a thousand dollars) samples every carload of pulp or coal or anything else you buy. It is his business to do this. He samples that and tells you that every ton of pulp you bought represents nine hundred and twenty-two pounds of available fiber, and that is all you need to know. If you have this much available fiber you are only going to get so much paper out of it.

Now the sampling of pulp as done by a testing man is different from when other people do it. He would go into the car before they started to unload it, take a sample from each of the four corners, and the middle, a small piece. He would weigh it, put it away. As the car was unloaded he would take other samples, and put them away. Finally, he would take that whole bunch which might be ten or fifteen pounds of pulp, and grind it up into a mass and quarter it until he got a small amount of pulp, maybe an ounce or two, that represented that shipment absolutely accurate. That takes a technical man; you haven't time to do that stuff. It takes patience and men trained to do it. When he is through he will take that piece of pulp and put it through his chemical and physical test, and tell you that carload for which you paid for fifty tons of pulp has only forty tons of available pulp in it. You can then tell the president why it is you couldn't make more paper, because he didn't buy but so much pulp. He goes through the whole gamut of materials used in the paper mill.

The Matter of Alum and Water

You take your alum. It is supposed to contain fourteen to eighteen per cent of aluminum. One-sixth of your alum is aluminum and all the stuff you need in that alum is aluminum. The other five-sixths are of no use to you. If some manufacturer sells you alum (I am not calling this sulphate of aluminum. I remember at the banquet last year you didn't like it) that contains twelve or thirteen per cent of aluminum, and you put so many pounds in your beater, you are going to get results and you don't know why. Your young chemist can tell you.

Most board mills get their water from wells. A well is sunk. You get a nice flow of water, have it analyzed. It has so many parts of this and that, and some one tells you it is mighty good for rheumatism, and then this well is forgotten as long as it produces water. That well changes its complexion so often you would be surprised. One of the duties of your chemist is a quarterly or monthly analysis of the water coming out of that well. It may be running up very high in sulphates or solids, and you may be having all kinds of boiler trouble and the boss says, "It is not the well. Twenty-two months ago we had that water analyzed. It is not the well. It is the way you are firing; can the fireman," etc.

Your chemist can show you that quickly at little expense. I think that is enough to show what I mean by "chemical control." When I get through I will be glad to answer any questions, if I can.

Now, to keep the controlling chemist under control is an important thing. Let the superintendent who is going to have the service of the chemist hire the chemist, go over the plant with him and show him what is to be done. Your chemist does not need to know anything about a paper mill. That is not important. Pick out a suitable place where the light is good, preferably a north light, where there is plenty of warmth and not too much dirt, where he can get light or steam and electricity and gas, if possible, and put a little partition around it, with a bench at the appropriate height. Let him have five hundred dollars with which to buy laboratory equipment, and you will be surprised what a complete, fine-looking laboratory he can buy. I would not give him more than that, because chemists are like superintendents of board mills, a lot of them will buy and buy and buy until you stop them; every time you get a new chemist he will want a new kind of something or other, just as the superintendent wants a new set of boilers or a steam engine or some trifle like that.

When he is in there, start him analyzing first your water, your coal and your purchases of raw material, and have him bring the results to you without recommendations, because he doesn't know the paper business. He can tell you things you can't see, and after you have started that far, just let nature take its course, and you will be surprised how that man will become as useful a tool to you as the pipe-fitter who doesn't run the business, but whom you tell what you want done.

I have sat in this room once a month for a great many years. I sat here with the Box Board Association, Charlie White's organization, and various others. We have sat around tables here, eaten meals that cost three or four dollars apiece, and we have discussed and discussed these things.

I was very much interested in listening to Mr. Burt's question of price of board. I want to tell you these men sat around the table month after month through prosperous and dull years (and the last two years were the dullest of the dull) and they had no solution for this thing. We had, at this table, the best brains of the board business. I don't mean to say they are the best brains in the world, but in the board business, and we would go around the table asking how business was. Charlie White would ask each one what his suggestion was to remedy the thing and they had no remedy. Such methods as manipulating your product so as to curtail production are not practicable. They don't work. They have been tried and tried and tried. They don't work for the reason that the men who run the mill are not honest with themselves or with each other. If men had quit their theorizing on how to manipulate the market and keep within the law, or never mind the law, keep out of jail, and had come in on this matter of lowering the cost by knowing what stuff was costing, the board business would not have gotten into the condition it has been in for the last two years.

Demand Explanation

I want to tell you one little trick about the control of your chemist. It is this: I demand of my engineer, whether he is an engineer or chemist or a lawyer or doctor or an auditor, that he explain to me what he is doing so that I understand it. That is a task but he has got to explain it so that I can understand it. In the first place, it is important that I know what he is talking about. If he can't explain it so I know what he is talking about I don't know whether he knows or not; if he can, I know he knows. Try that on your lawyer, or your doctor. It is a great thing for a lawyer to sit back in his chair and puff up and tell you a few Latin phrases, and get you in a place where you had rather believe he is telling the truth than to have him think you don't know what he is talking about.

Say to your engineer, "I don't understand that. Tell it to me so I know what you are talking about." If he knows what he is talking about he can tell it to you so you understand it.

Keep the chemist under your control; you will be amazed at the results you can get.

CHAIRMAN NICELY: What does a good chemist cost?

MR. HERMAN: It is a pity, but it is true that you can engage what is called a routine chemist for as little as you can get a good bookkeeper.

XUM

BEATING AND BEATING ENGINES*

By Charles W. Shartle, Pres. Shartle Bros. Machine Co., Middletown, Ohio.

Your secretary has invited me to address you on the subject of beating, and as I never miss an opportunity to talk I have accepted his invitation.

However, upon going into the subject I found that I knew more about beaters than I did about beating and that the field covered by the subject assigned me was more comprehensive than I could cover in the time which you have allotted. I have, therefore, changed the subject to beaters.

Perhaps this subject really should be beater instead of beaters for it has been my experience that I have had about all that I could do in the past thirty years to learn about just one type of beater. This being a beater or a development of the beater for

Charles W. Shartle

handling mixed papers. You are all manufacturers of board, and consequently your interest lies along the line of a beater or beaters which will satisfactorily handle your stock and it is my intention to spend most of my time on this phase of the beater question.

Beaters of the Past and Present

However, it may be of interest to you as papermakers to know something of the various types of beaters which have been used in the past and some of which are being used today.

Doubtless most of you are familiar with most of these types.

I have had some lantern slides made showing several types of beaters.

First, I wish to show the picture of an old time mill. This mill was owned by my great grandfather and was located just outside of Linlithgow, Scotland.

An old uncle of mine used to tell me a story about a bridge or culvert that covered the mill race to this mill. This bridge was known as Kerry Brig.

This bridge was built by the Romans along about the 13th century and to the best of my knowledge is still standing. About 500 years after this bridge or Kerry Brig as it is known in Linlithgow was built, a man who had lived there for many years and had gone away for about five years returned and as he was walking about with an old cronie, they came to this old Kerry Brig, he stopped and in a surprised manner said: "Oh Kerry Brig are ye standin' yet?"

It is a standing joke in Linlithgow, for every one who passes Kerry Brig to say, "Oh Kerry Brig are ye standin' yet?"

Just a few years ago I met a Scotchman in Cincinnati who made brass work. He asked me if I could get him a piece of jacket to use for polishing and I asked him how he knew about jacket and he told me he had worked in a paper mill in Linlithgow, Scotland, and I said: "Oh Kerry Brig are ye standin' yet?" You should have seen how surprised he looked. It developed he was my mother's cousin.

I don't know much about that mill except that the paper was made by hand and a great uncle told me that the beaters were three plungers working in a vat. They were made of wood with iron bands and cams on a shaft would raise them and they dropped of their own weight upon the bottom of the tub which was made of a large stone. The stock was circulated with a paddle, so I suppose this is where the name of beater originated.

The Gould and Other Beaters

There was a beater made along about 1880 which I do not think many of you ever saw or heard about. It was the Gould. I could not find a picture of it. This beater was made in the shape of a pear. The large part was about 8' in diameter and was set vertically, the small end down. The shaft was vertical and on it was fastened a disc about 3' in diameter which carried the fly bars and the bed plate was fastened to the tub. It was driven by a pair of bevel mortise gears and the shaft was adjusted vertically. I saw one running on rope stock and the stock was fairly churned and got very hot. This beater was not a success—only a few were installed and to my knowledge none are in use today.

Additional types of beaters which have been used and some of which are now used are the Standard Hollander Umpherson, Patent, Horne, Patent Emerson, Taylor, Rabus, and Niagara.

You are all more or less familiar with these beaters excepting possibly the Taylor. I have never seen one of these but am under the impression that they were used in England. In this beater the roll is at the top and about one-half of the tub sets below the floor line. The stock passes under the roll down into the tub and is returned to the roll by a centrifugal pump. I leave it to you to judge how this would work on New York dump stock.

The original Hollander is so well known to all of you that it is not necessary for me to show a picture of it.

It is not my intention to speak disparagingly of any beater, but, I have lived long enough and seen enough of beating to know that the old fashioned Hollander is here to stay, at least it has weathered all the storms of new types of beaters to date.

Beaters for Particular Purposes

However, I am of the opinion that there is too little consideration given to the type of beater purchased for a particular purpose. For instance: Suppose John Brown wants to build a mill to make roofing felt,—he needs say six 1,500 beaters, he goes to see the firm building them,—they show him a lot going through the shop for A. G. Wightman who is building a mill to make writing papers out of rags, and then Jake Parent calls for some beaters to make board and he is shown the same beaters, and these same beaters are sold for any and all kinds of stock. Now, that is just where the machine man has made his mistake, because I believe most of the beaters which I have shown have their place.

The builder should study the conditions under which the beater is going to operate and take into consideration the kind of paper the mill is going to make and prescribe a certain beater for that

*Delivered at the meeting of the Western Board Division of the American Pulp and Paper Mill Superintendents' Association, November 25, 1922.

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purpose. It has been my life study to build up a beater for board only. All this is of interest in only a general way.

Most of you have been of the opinion that the method and the beaters which you have been using in handling old paper stock are wrong. However, most of you men have at some time made fine papers and naturally it is somewhat difficult to get away from the idea that mixed papers require beating in the sense that the roll be set down on the bed plate. In the past few years this practice has generally been abandoned until today very few mills set the roll down on old paper stock.

I know of one board mill which always set the roll down until about four years ago. This mill had four beaters on the filler. They were always having to make adjustments due to a poor sheet but the superintendent insisted on keeping the roll down hard until they broke a shaft on one beater and for some reason or other on this day they did not have sufficient power to set the rolls down. This left them running on three beaters none of which had the roll down. They made a sheet so much better that they have never fixed the old broken beater and never again set the roll down.

Should Be Process of Disintegration

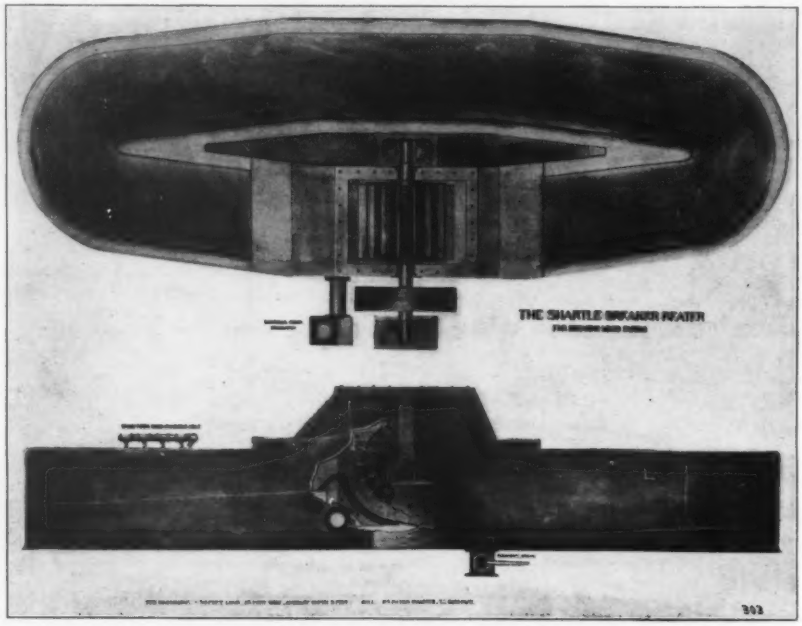
This brings out just one point and that is that with old mixed papers the process should be one of disintegration rather than one of drawing out the fibers. There has been another factor in making you seek some other method for reducing mixed papers and that is the large amount of foreign material which is in the stock. This has been the source of trouble all through the mill. It has also run up labor costs, for you have attempted to remove this foreign material by hand and have not been successful.

Now, some years ago I was standing beside a beater which was being charged with old paper stock for boxboard and when the beater was finally filled I picked out a handful of the stock and realized that at least 75 per cent of the stock was beaten or disintegrated sufficiently so that it was ready for the jordan. This idea brought about the development of the system here shown. This system consisted of charging one beater which we called a breaker, continuously. The side of the beater was cut out and overflowed into a sump out of which it was pumped by an 18 or 24-inch single plunger pump to a settling trough. These pumps were designed especially for this purpose.

We experimented with several types of troughs and riffle boards but finally came to using a plain trough about 24" deep and 48" wide and 50' long. Today we make this trough guided by our experience according to the tonnage required.

As soon as the stock from the breaker was pumped to the settling trough the consistency was reduced by the addition of sufficient volume of water so as to cause the metals and heavy materials to settle and the wood and cork to float, same being removed by a skimmer. It took considerable experimenting before we found the proper amount of water to add.

The point that comes to your mind here is that we require a large volume of additional water. This is not true as you will see in a moment.



THE SHARTLE BREAKER BEATER

The stock passes from the trough to a screen. This screen is equipped with scrapers. The scrapers carry the coarse stuff over the screen into a secondary beater. The stock which has been disintegrated sufficiently passes through the screen into a decker which consists of a cylinder mold and coucher, the purpose being to remove the excess water and return it to the settling trough thus using the same water over and over again.

The secondary beater is equipped with a Brownell Buehler Perforated Back fall, the stock passing out of this beater automatically when properly reduced to the beater chest.

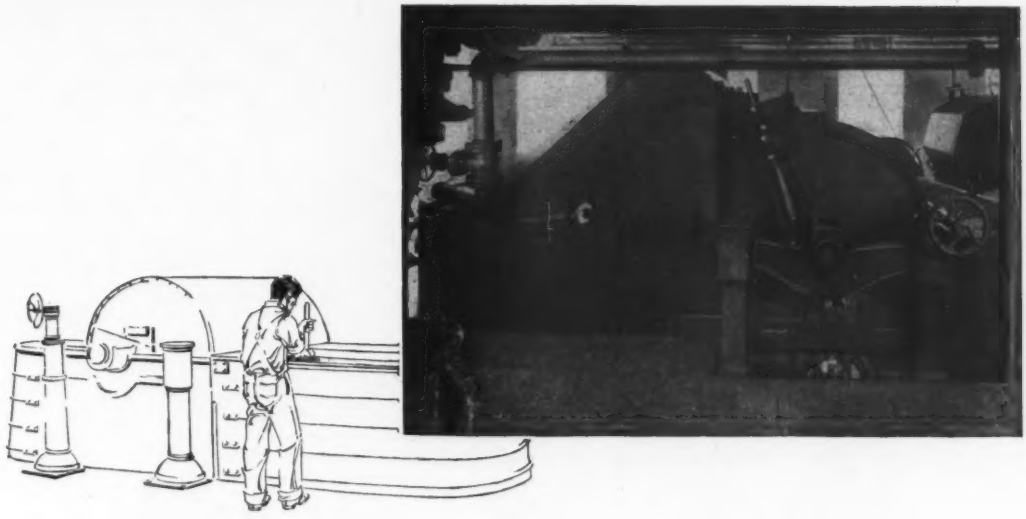
Method Developed Several Things

Now, this method of handling developed several things among which were that we could take New York dump stock and remove automatically all foreign materials. This is exemplified by the cut showing the foreign materials, removed in one week from a mill making 50-tons per day. Without this system a large part of this material would have gone on to the jordans, pumps, and even worked over to the machine.

You have all had experience with just such conditions and know even better than I the trouble it causes.

In addition to the system shown, we are installing at the Richardson Company, Lockland, Ohio, a system which we call the

XUM



How to Overcome Sluggish Circulation in your Beaters

If you have trouble keeping the stock in your beaters moving fast enough to remain thoroughly mixed and in perfect suspension investigate the advantages of

Leo Shlick's Beater Hood.

Strong and Basic Patents Allowed

It is a practical appliance which is guaranteed to double the circulation and increase the capacity by at least 25 percent of any beater you desire to put it on without using any more power to do it. It can be quickly installed and results are immediate.

There is nothing ambiguous about this guaranty. We are willing to install a Shlick Beater Hood on a trial basis.

Let us send you the details of our cure for Beaters having a sluggish circulation.

BIRD MACHINE COMPANY

SOUTH WALPOLE, MASSACHUSETTS

Western Representative
T. H. Savery, Jr. 1718 Republic Bldg., Chicago, Ill.

Leo Shlick's Beater Hood

4674

Shartle Breaker System. We are also installing this system in several other mills.

What the System Consists of

This cut clearly shows this system. It consists first of a breaker beater. Now you have been accustomed to taking a standard beater and using it as a breaker. We build a special breaker as shown, one that will last a lifetime and will disintegrate more mixed papers than a half dozen ordinary breakers.

These breakers are built in all sizes up to a capacity of 400,000 pounds per 24 hours. We haven't made any larger than this to date but I am perfectly safe in saying we can build one for 800,000 pounds per 24 hours if we have a call for it.

In building this breaker we disregarded present standards and built with just one point in view—that of successfully handling mixed papers at the lowest possible cost. The tub in this breaker is of concrete and varies in length from 40′ to 75′ according to the tonnage required and space available.

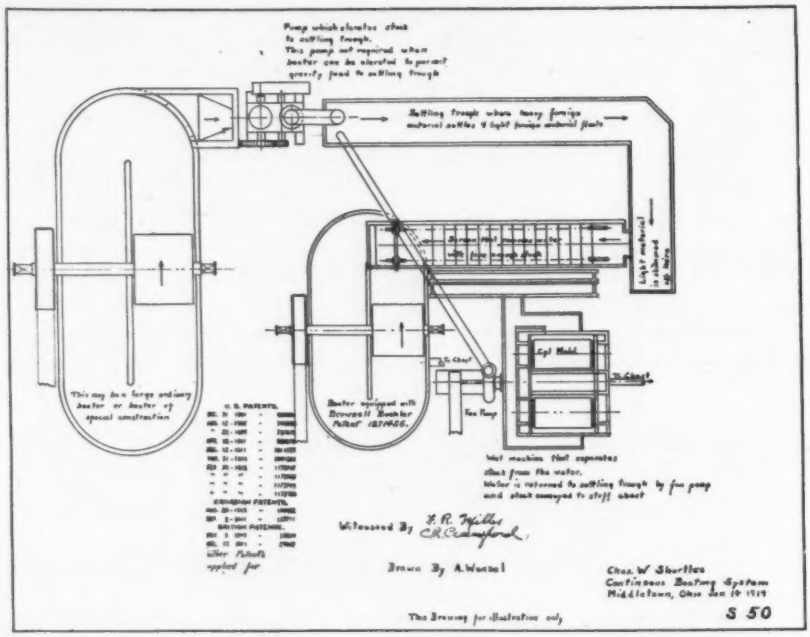
After the stock passes through the backfall and is cleaned in the settling trough it passes to the decker or thickener and from there to the chest.

The main difference in this system is that we use a perforated backfall in the breaker and do away with the screens.

Does Three Things

Now, we claim that the Shartle system does three things: First—We automatically remove all foreign material from the stock. This does away with cleaning out stock chests, vats, tearing out jordans, stops pumps from plugging and makes a better, stronger sheet.

I cannot over-emphasize the importance of the cleaning of the The breaker can be provided with a string catcher if desired. The fact that this breaker is so large enables it to be run for a week or more without cleaning depending upon the nature of the stock. It means so much more than is generally realized. Il-


Pump which elevates stock to settling trough. This pump not required when beater can be elevated to permit gravity feed to settling trough
Settling trough where heavy foreign material settles & light foreign material floats
Light material is skimmed off here
This may be a large ordinary beater or beater of special construction
Beater equipped with Brownell Beater Patent 1874456.
Wet machine that separates stock from the water. Water is returned to settling trough by fan pump and stock conveyed to stuff chest
Witnessed By F. P. Miller C.R. Crawford
Drawn By A. Wentzel
Chas. W. Shartle Continuous Beating System Middletown, Ohio Jan 16 1919
This Drawing for illustration only
S 50

SHOWING THE TWO BEATERS, THE SETTLING TROUGH, SCREENS AND WET MACHINE AND THE ORIGINAL SHARTLE SYSTEM

As a general rule the top of the tub is set about one foot above floor line. This enables the stock to be trucked in, the wires cut and the entire bale pushed in the breaker at once. There is absolutely no danger to the breaker in doing this as it is built for just such service. The roll has a steel shaft which is only carried to the hollow midfeather,—thus permitting the buckfall to be raised to a height assuring a rapid circulation of the stock.

The roll carries bars 1″ x 12″, each bar being held in place by an individual ring about 8″ in diameter. The bars are spaced on 12″ centers. There is no adjustment to the roll, it being mounted in specially designed trunnion type bearings which are carried on heavy coil springs thus taking up any shocks.

There is no bed plate furnished and the rolls set off the bottom from 6 to 8 inches.

The back fall is of the Brownell Bushler type, the face being drilled with proper size holes permitting the stock to automatically pass through when sufficiently disintegrated. Due to the centrifugal force from the roll, these holes will not plug up.

The flow stock from the backfall is controlled by a head box. stock. The large volume of stock in the breaker also insures a more even mixture and gets the stock in shape so that less work is required of the jordans.

lustrating this point Jack Brookover of the Frank P. Miller Paper Company, East Downingtown, Pa., has written us concerning the Shartle system in his mill.

The new mill of this company was built in 1917. Due to lack of coal they were down part of this year but later ran continuously until 1920. At this time they refilled their jordans for the first time and the second filling is still in the jordans. Of course, part of this may be due to the fact that they use Miami Jordans.

The large machine in this mill is a six cylinder 136″ machine and the largest stock pump used is an 8 x 18 Duplex. Mr. Brookover states that he is enabled to use this small pump for the reason that the Shartle system thoroughly cleans the stock and his pumps never plug and are always working at full capacity.

Saving in Labor

Second—We claim a saving in labor. This is due to the fact that we set our breaker as close to the point of supply as possible, thus reducing the trucking to a minimum. We further save in labor as all the filler stock is handled at one point and instead of attempting to remove foreign material by hand, it is all done by machinery.

Owing to the fact that the breaker is set approximately at floor

For years the study of felt manufacturers has been the construction of a board felt combination to give smoother finish and greater production with less trouble.

KENWOOD ONE SIDED BOARD FELTS SOLVED THIS PROBLEM

They were the first successful application of this type of weave to the large board machine running at high speed. They have passed the period of experimentation and today are unexcelled:

—in the finish they produce
—in daily production during life of felt
—in length of life
—in freedom from such troubles as curling edges, uneven width, stretching and blowing

Kenwood One Sided Bottom Board Felts

will not only produce board with a better finish but board with a *higher test.* This is due in part to the greater water removal and in part to the more even caliper of board produced by these felts.

Kenwood One Sided Superfine Top Felts

give wonderful results in life, in finish and in high daily production. This felt is truly *superfine* being made of fine yarns spun from the choicest quality of wool suited to the purpose selected from the best fleeces grown.

Kenwood One Sided Fine and Super Press Felts

eliminate the necessity for heavy, close, expensive plate and B. B. press felts on 2nd, 3rd and 4th presses. Kenwood One Sided Fine and Super Press Felts give the required finish at a higher rate of production and cost much less. There is also less interruption for washing, etc.

Clothing Recommended for Board Machines

The experience and practice of some of the largest and most successfully operated board mills of this country recommends the following clothing for board machines.

Bottoms: Kenwood One Sided Bottom Board, Design 212.
Tops: Kenwood One Sided Superfine Top, Design 187.
2nd Press: Kenwood One Sided Fine Press, Design 18M.
3rd Press: Kenwood One Sided Fine Press, Design 18M.
4th Press: Kenwood One Sided Superfine Press, Design 223.

For conditions more severe than the average, and for machines that are not in the best condition, we recommend the use of Kenwood Plain Bottom Felt Design 196 and Kenwood Top Felt Design 176 leaving presses as above.

The advantages of the Kenwood One Sided weave are offered without any advance in price. Only where finer weaves and finer yarns are made necessary either in One Sided or plain weave felts are extra prices charged.

F. C. HUYCK & SONS

KENWOOD MILLS ALBANY, N. Y.
KENWOOD MILLS LTD., ARNPRIOR, ONT., CANADA

level no lifting is required to furnish the breaker, in fact the entire bale is fed into the breaker at one time.

Sunday clean ups are avoided.

Further savings in labor are effected through less repairs to equipment. As an additional point labor is always better satisfied.

Illustrating this: Mr. Parent, superintendent of the Western Board and Paper Company, Kalamazoo, Mich., states that where he formerly could not keep men on his beater gang, he can't get rid of them since installing the Shartle Breaker system.

Saving in Power

We also claim a saving in power. Unfortunately, we do not have at the present time any motor driven installations which are in operation. We have three systems being installed, all of which will be motor driven. As soon as these are placed in operation we will have definite power figures. However, we can say that to date we have not installed a system where a material saving in power has not been effected.

Now, I probably could talk for several hours on the proper way of handling mixed papers, however, what you want is results. You demand that I show you that I can and have done the things I claim.

I am going to read a letter which I received a few months ago from Mr. W. E. Smith of the Bogota Paper and Board Company, Bogota, N. J. We did not ask Mr. Smith for this letter and consequently it is worth considerable more than if we had.

The Shartle Brothers Machine Company,
Middletown, Ohio,
Gentlemen:—

"We wish to advise you that we have started up the breaker beater and we are highly pleased with the operation of the same. It has not given us a bit of trouble from the very start. Everything went off in splendid shape. We presume Mr. Morrison has reported to you, as he was out here and saw the operation of it. You certainly have done a great service to the paper board manufacturing interests by putting this beater on the market. No mill making paper board can afford to be without it. If we could not get another one, no one has money enough to buy this one so long as we want to operate our mill. So that you will see the high opinion we have of this machine."

Bogota Paper and Board Company.

As I stated before I can go on talking indefinitely on this subject—this letter, however, probably carries my point stronger than anything I can say. I, therefore, wish to state that I will be only too glad to answer, to the best of my ability any questions you may ask.

There are doubtless a great many features upon which I have not touched and in which you are vitally interested and probably there are some questions which have arisen in your minds as to various details of the Shartle system and it is entirely possible that some of you will have some suggestions to make. I will be only too glad to discuss these things with you.

Your problems are the problems which I as a builder of paper mill machinery desire to solve and it may be of interest to you to know that we are constantly working towards improved methods and equipment in the board mill.

I would welcome your criticism as I believe that I can successfully answer any objections which you may have.

I wish to thank you for the opportunity which you have accorded to me of meeting with you and assure you that I appreciate it very much indeed.

At all times The Shartle Brothers Machine Company maintain open house and at any time that you are in the Miami Valley, we hope that you will call on us as we will always be glad to see you.

Refuse Taken Out in One Day's Run With Shartle System

Hawley Pulp & Paper Co. to Expand

Oregon City, Ore., November 22, 1922.—Expenditure of between $1,500,000 and $1,750,000 in the enlargement of its paper mill here was announced for the Hawley Pulp and Paper Company last week by W. P. Hawley Sr., outlining plans to be put into action by the company in the near future. Options from the Portland Railway, Light and Power Company for the additional water power necessary in the operation of the new machines have been secured, Mr. Hawley states.

A new paper machine with a capacity of 90 tons a day is to be added to the present plant, nearly doubling its present capacity of 110 tons a day. Additional pulp equipment is to be installed. For this purpose high water power sufficient for the grinding of 75 tons of pulp a day has been secured. The power for the machine itself will be secured from water power capable of 1,000 horsepower, arrangements for which have been completed.

The new plant, according to Mr. Hawley, will employ 250 men in addition to the 600 now employed. The contemplated improvements, he declares, have been made necessary by the amount of business which the local firm is handling.

The Hawley Pulp and Paper Company was incorporated in 1908 and began operations in 1909. The plant employs 600 men. The company has been obliged to increase its capacity four times since it started operations.

XUM

Established 1886

Organization

Reputation

The day of miracles is done. The past is the only real guide to the future. What man can do depends largely upon what he has done. And that applies with equal force to business organizations.

You make no mistake, you eliminate all guesswork, in dealing with an institution that has been thirty-five years in building a reputation for efficiency, and in establishing the character of its service.

You cannot make bricks of straw—at least not in A.D. 1922. *If you want quality service, you must seek it among those who are in a position to give it to you.*

M. GOTTESMAN & COMPANY

INCORPORATED

18 East 41st Street

New York, N. Y.

U. S. A.

HOLYOKE OFFICE
185 Pine Street

KALAMAZOO OFFICE
No. 1 Humphrey Block

STOCKHOLM OFFICE
Stureplan, 13

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KRAFT IMPORTERS SUBJECT TO CUSTOMS INVESTIGATION

Additional Duties Have Been Assessed for Alleged Undervaluations in Importers' Entries—Postponement of Hearings As a Result of Appraisal Protests May Total More Than Two Dozen, Says Chief Examiner—Total Amount of Extra Duties Involved Unofficially Estimated at $500,000—Attitude of Importers, Customs Authorities and American Paper and Pulp Association.

Investigations by the government as to the declared value of imported kraft paper have resulted in notices of undervaluation being filed against several large New York concerns importing this commodity from Norway and Sweden and, to a limited extent, from Finland. In many instances the importers have not utilized their right of appeal to a single general appraiser, but have accepted the advanced valuations and paid the additional duty of 1 per cent of the total final appraised value of the merchandise for each 1 per cent that this exceeds the value declared in the importer's entry. It is stated that the amount of additional duties importers may have to pay may total upwards of $500,000.

Recently, however, the extent of these alleged undervaluations has been so great, two dozen or more cases having been postponed during the past few weeks, according to J. R. Hecht, Chief Examiner of the Customs Department, that protests have been entered by various importers. The merchandise is then subjected to a reappraisal and a hearing is held before a single General Appraiser. At present a number of these cases are pending while a report of actual sales in Norway or Sweden is being made by the U. S. Treasury attache in those countries, to support the reports made by the Consuls.

The View of One Importer

A high official of one of the large importing companies in the proceedings, when asked to give the importer's attitude in this matter, issued the following statement:

"You doubtless know that there has been a lot of imported kraft coming in and big importers in New York have been in the habit of entering the paper for duty at prevailing rate of 30 per cent on basis of price at which they bought it, submitting the usual way, their invoice and other documentary proof to the Government and later on, after the paper has been entered into the country and resold, the Government has found, from information received from the commercial attache at Stockholm or Gothenburg, Sweden or Norway, Finland or Germany, or wherever the paper comes from, that price prevailing in that country at the time of shipment was much in excess of the price at which it was entered and the importers have all been heavily penalized and are facing very expensive law suits with the Government.

"Cannot Estimate Landed Cost"

"There is no way of telling, when an importer buys foreign krafts or sulphite papers, what its cost will be landed, as duty is assessed on basis of price prevailing at time of shipment in the country of manufacture, so it is impossible to figure what the actual cost at time of purchase will be. Our company has just had a law suit involving many thousands of dollars with the Government, but the Government has asked for postponement of 60 days until they can get further information through the commercial attaches in those foreign countries as to just what prices actually were at the time of shipment and our company will be out the additional expense at that time through legal and expert and other fees in getting the matter straightened out. All these other importers have the same troubles and it is reported that some of them have been penalized for over $100,000.

"So the importation of foreign papers has fallen off. There will be quite some coming in on old contracts because of letters of credit put up on the other side, but new business has fallen off sharply. First because the prices asked by foreign mills are mounting steadily, second because of this constant trouble with the Government, which, so far has not found a solution.

"Domestic Mills are Indifferent"

"The domestic kraft mills are in touch with the situation. They know the trouble the importers are having and for that reason have not attempted to meet this competition or shown any interest in it, knowing it is only a question of time before the importation of this foreign kraft paper will be shut off entirely, as these legal and other expenses add to the cost of the paper, naturally makes the importers' lot not a happy one as the profit is more than wiped out by the time they get through. Many lots have already been thrown into storage because the foreign mills are careless in the way of handling the documents and very often the documents don't get into the hands of the importers until two days have elapsed and the steamship company has thrown it into bonded warehouses and foreign mills have paid no attention that they stand all or part of this loss because they did not get the documents here in time or make them out so they would be acceptable to the customs authorities.

"We have just come through a law trouble with the Government and know that a lot of people are asking questions about it—the trade in general would like to hear of it * * *."

Opinion of Chief Examiner

"The importers are perfectly honest in the matter," said Chief Examiner Hecht, in an interview with a representative of the PAPER TRADE JOURNAL. "They are entering goods at the price they paid at the time of shipment. Since the law requires the appraiser to take the higher of the two market values, domestic or export, there is involved merely a technical question of market value as a result of the new tariff law.

"Most American manufacturers interpret undervaluation as deliberate fraud," continued Mr. Hecht. "It may be fraud or it may be a technical mistake. So far I have not come across any evidence of fraud whatever. The importer is very much handicapped. He doesn't know what his landed cost will be.

U. S. Manufacturers Have Right of Protest

"Most of this undervalued paper is coming from Norway and Sweden and about 2 or 3 per cent from Finland. The present law gives American manufacturers the right to protest against the valuation claimed by importers as well as classification and rate of duty. However, any importer may come to see me before entering his merchandise so as to find the latest market value. The majority of importers are now accepting our values without protest. Those importers who have not applied to this department for information have contended that the quantity of kraft paper sold in the home market is insignificant in comparison to the quantity exported. They have hoped to prove that actual sales in the home market are lower than values reported to the Appraiser by the United States Consul.

No "Dumping" of German Kraft

"The matter of 'dumping,' which is a separate issue, is now before the Secretary of the Treasury. Reports of the examiners show that the discrepancy between the prices involved amounts to approximately 10 per cent. There has not, contrary to the popular opinion, been any 'dumping' of paper from Germany despite the fact that the German manufacturer can undersell the American manufacturer. He is charging a higher price for export than for home consumption.

"One of the large kraft importers placed orders about a year ago during a rising export market abroad. Orders placed in January were not completed until there had been delivery on later orders. The market value of the product becomes effective upon a

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Not a Page from "Who's Who in Paper Mills"
Just Some of Our Customers *This Last Year*

G. A. Ackerman Paper Mills
Acme Paper Company
Adams Bag Company
Albemarle Paper Mfg. Co.
American Coating Mills
American Photo Chemical Co.
American Tissue Mills
American Writing Paper Co.
Allied Paper Mills
Baeder Adamson Co.
Barnes Wall Paper Co.
Becker, Smith & Page, Inc.
Berkshire Coated Paper Co.
Beverly Wall Paper Co.
Bird & Son
Bogota Paper & Board Co.
Brown Company
Byron Weston Co.
Campbell Wall Paper Co.
Martin Cantine Co.
Champion-International Co.
Chesapeake Paper Board Co.
Crocker McElwain Co.
Cushnoc Paper Co.
Defiance Paper Company
DeGrasse Paper Company
Dennison Mfg. Co.
Dryden Pulp & Paper Co., Ltd.
Federal Paper Board Co., Inc.
Finch Pruyn Company
Forbes Lithograph Mfg. Co.
Fort Orange Paper Co.
Fort William Paper Company, Ltd.
Robert Gair Company
Gilbert Paper Company
P. H. Glatfelter Company
Robert Griffin Company
Great Northern Paper Co.
Hawthorne Paper Company

Heating

Ventilating

Drying

Vapor Removal

Fans

Blowers

"Briner" Economizers

Sturtevant Unit Heaters

Heating & Ventilating System, Paterson Parchment Paper Co., Passaic, New Jersey

Hinde & Dauch Paper Co.
Hoboken Paper Mills Co., Inc.
Holyoke Card & Paper Company
Hummel & Downing Co.
Imperial Wall Paper Co.
International Paper Co.
A. W. Jack Corp.
Jessup & Moore Paper Co.
Kalamazoo Vegetable Parchment Co.
Keyes Fibre Co.
Kimberly-Clark Co.
Lee Paper Co.
Lowe Paper Co.
Merrimac Paper Co.
New York & Pennsylvania Co.
Ogdensburg Paper Mills, Inc.
Paterson Parchment Paper Co.
Provincial Paper Mills, Ltd.
Peshtigo Paper Co.
Regenstein-Veeder Co.
Robertson Paper Co.
River Raisin Paper Co.
Schroon River Pulp & Paper Co.
St. Regis Paper Co.
St. Maurice Lumber Co., Ltd.
J. J. Spaulding & Sons Co.
Standard Paper Co.
Sears, Roebuck Co.
Spanish River Pulp & Paper Co.
Strathmore Paper Co.
Spruce Falls Co., Ltd.
Standard Wall Paper Co.
The Tissue Co.
Union Paper Co.
Underwood Mills
Viscose Company
Watervliet Paper Co.
Western Board & Paper Co.
West Virginia Pulp & Paper Co.
D. Whiting & Sons
York Haven Paper Co.

J. O. ROSS ENGINEERING CORPORATION

549 W. Washington Blvd.
CHICAGO

30 E. 42nd St.
NEW YORK CITY

79 Milk Street
BOSTON

delivery against the latest order. This particular importer didn't know the law. His concern did not know that it should have entered goods at the latest value."

In the latter case, Mr. Hecht pointed out, the additional duties, if imposed, may amount to more than $100,000. The exact law in this regard, as presented in Section 489 of the Tariff Act of 1922 in the paragraph on Additional Duties, is as follows:

What the Law Says:

"If the final appraised value of any article of imported merchandise which is subject to an ad valorem rate of duty or to a duty based upon or regulated in any manner by the value thereof shall exceed the entered value, there shall be levied, collected and paid, in addition to the duties imposed by law on such merchandise, an additional duty of 1 per centum of the total final appraised value thereof for each 1 per centum that such final appraised value exceeds the value declared in the entry. Such additional duties shall not be construed to be penal and shall not be remitted nor payment thereof in any way avoided except in the case of a manifest clerical error, upon the order of the Secretary of the Treasury, or in any case upon the finding of the Board of General Appraisers, upon a petition filed and supported by satisfactory evidence under such rules as the Board may prescribe, that the entry of the merchandise at a less value than that returned upon final appraisement was without any intent to defraud the revenue of the United States or misrepresent the facts of the case or to deceive the appraiser as to the value of the merchandise."

"The importer is expected to use due diligence in this matter," Mr. Hecht asserted, "and is supposed to inform himself and try to find out what the true value of the merchandise was."

Hearings and Postponements

According to D. F. Dutcher, Chief Clerk of the Board of U. S. General Appraisers, a partial hearing of the Republic Bag and Paper Company, 200 Fifth avenue, New York, took place November 21 before Judge Fischer, the hearing to be continued on January 16, 1923. Another hearing has also been set for December 5 at 10:30 a. m. Both of these hearings, according to Chief Examiner Hecht, involve additional duties on shipments of Swedish kraft paper. A hearing of the Hudson Trading Company, 300 Madison avenue, New York, has been set for December 19, as a result of a protest on the part of that concern against the additional duties involved. It is stated that several other large importers are also connected with these proceedings, the total amount of additional duties involved being estimated at more than half a million dollars.

Domestic Co-operation Sought

"We shall greatly appreciate the co-operation of domestic manufacturers, other importers, or any who may be affected by the valuations," said Mr. Hoppin, Assistant Attorney-General and Chief of the Board of U. S. General Appraisers, when asked by the PAPER TRADE JOURNAL representative. "The hearings are open to the public, and the present law specifically provides this opportunity for American manufacturers to safeguard their interests by checking up on the valuations entered by importers.

"American manufacturers may not appreciate the vast amount of work which is being done by this department in their behalf. Whatever delays or postponements of hearings there have been came as a result of requests from various importers for more time in which to collect data to substantiate their protests."

Mr. Iestaedter, of the Board of U. S. General Appraisers, further stated that, "owing to the fact that the entire issue in the matter of deciding undervaluation protests depends upon the definite establishment of the prevailing home market price on the date of shipment, the Government will be glad to have present at hearings any trade witnesses who are able to testify in this regard."

Statement of Dr. Hugh P. Baker

"The report that importers of foreign kraft paper had been undervaluing imports comes as an entire surprise," said Dr. Hugh P. Baker, executive secretary of the American Paper and Pulp Association when informed by the PAPER TRADE JOURNAL representative of the developments at the Customs House. "The Association has, since the anti-dumping act went into effect, reported to the customs authorities several cases in which it was reported that kraft, as well as other papers were being dumped under meaning of anti-dumping laws of the Emergency Tariff Law.

"The matter of undervaluation of imports is an entirely separate matter, in which the Association has not figured in any way. The dumping act has no connection with the valuation of imports, but applies where foreign paper is being sold in America at prices below the prices at which the paper in question is selling in the country of origin."

Conewago Felt & Paper Co. Formed

YORN HAVEN, Pa., November 27, 1922.—The Conewago Felt and Paper Company to be incorporated under the laws of Maryland is now in the process of organization and will erect a modern felt and paper mill.

The company has about closed the deal and purchased from John Whisler, York Haven, Pa., twelve acres of land on the main line of the Penna. R. R., between York Haven and York, Pa. The property is situated on the big Conewago Creek, and one mile from the plant of the Hydro-Electric Company operated by the York Haven Water and Power Company.

The proposed plant will manufacture dry felt, flooring felts, building papers, asbestos papers, special felts and corrugated paper specialties. Building operations will start March 1, 1923. One paper machine of the cylinder type will be installed, the width has not yet been decided.

The entire plant except the Beater room will be driven electrically. The plant will be fire-proof construction, tile, concrete and steel. The machine room will be large enough for two machines. The company's headquarters are York Haven, Pa.

The president of the company is E. E. Brunner, a successful business man of York Haven. Mr. Brunner is president of the York Haven State Bank and president of the Hanover and McSherrytown Water Company.

O. R. Emigh, the vice-president and general manager of the new company has had twenty years of practical experience in the manufacture and selling of felts, roofings and asbestos paper products.

The treasurer, John S. Fishel, is vice-president of the York Haven State Bank and has been connected for twenty-seven years with the York Haven Paper Company as head of the shipping department.

Republic Paper Products Corp. Organized

RICHMOND, Va., November 27, 1922.—The Republic Paper Products Corporation has just been incorporated under the laws of Virginia with a capital stock of $50,000 and will start operations in the old Eagle Plant at 1408 West Marshall street.

A. L. Joseph has left the employ of the Republic Bag and Paper Company of New York and has been elected vice-president in complete charge of the new company. He arrives in Richmond on December 1, to take up his new duties, and the plant which is now undergoing a thorough over-hauling and repairing will then be ready to manufacture a full line of flat, square, self opening and millinery bags and paper sacks, principally self opening bags. Mr. Joseph is an old timer in the self opening bag business, having started almost 20 years ago with the old Topeka Paper Company, of Topeka, Kan. He has a host of friends throughout the jobbing and paper mill trade in both the North and West, and shortly after his arrival in Richmond is expected to send announcements to the trade appealing for business and to the paper mills manufacturing kraft and white bag paper looking for bag tonnage.

XUM

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XUM

EDDY PAPER CO. SELLS OUT TO EDDY PAPER CORP. OF ILL.

Seventy-Five Per Cent of the Stock Has Been Underwritten by the Chicago Stockholders, Providing $1,875,000 of New Capital—Although the Identity of the Chicago Parties Interested Has Not Been Disclosed, Rumor in Past Few Days Has Connected Name of Julius Rosenwald, of Sears, Roebuck & Co., With the New Concern—Growth of Company Has Been Spectacular.

[FROM OUR REGULAR CORRESPONDENT]

KALAMAZOO, Mich., November 27, 1922.—The Eddy Paper Company, operating three large board mills at Three Rivers and White Pigeon, has disposed of all its assets to the Eddy Paper Corporation of Illinois, a concern with a capitalization of 125,000 shares of no par value common and $350,000 seven per cent preferred stock.

This deal, which has been pending for several days, was concluded Saturday morning at a meeting of the stockholders, held in the directors room of the Kalamazoo-City Saving bank. Over 75 per cent of the outstanding stock was represented either in person or by proxy.

The Terms of the Transfer

The terms of the transfer will give present stockholders in the Eddy Paper Company, holders of $7,000,000 in common stock and approximately $1,750,000 preferred stock in the old corporation, 31,250 shares of no par value stock in the new corporation, or 25 per cent of the total outstanding issue.

The last available list of stockholders shows approximately 300 are holders of the 700,000 shares of common stock, while the 175,000 shares of preferred stock are in the hands of about 475 to 500 investors. Of the latter issue the holdings are largely in amounts less than 500 shares, being held widely throughout southwestern Michigan.

The other 75 per cent of stock in the new corporation, 93,750 shares, has been underwritten by the Chicago stockholders at $20 a share. This provides $1,875,000 of new capital.

The Illinois corporation assumes all debts of the old Eddy Paper Company. Certain creditors have agreed to accept the $350,000 seven per cent preferred stock, while the outstanding portion of the second million-dollar bond issue, about $300,000 in all, will be immediately retired. The trustee of the first Eddy bond issue, $1,250,000, have accepted the terms of the transfer and these bonds will be carried to maturity.

Allotment of stock and other details in the transfer will be perfected at a meeting of stockholders, which will be called in the immediate future, probably in Chicago.

President Blaney Is Perfectly Satisfied

Charles A. Blaney, president of the Eddy Paper Company, was not in Kalamazoo to attend the Saturday meeting. He had previously agreed to the proposition as carried out and expressed himself as perfectly satisfied.

"I accepted the presidency of the company purely for the purpose of protecting the interests of stockholders and creditors" said Mr. Blaney. "The deal just concluded meets with my approval fully. I feel that it was the best thing that could be done, when all things are considered. Now that it is an actuality, I will sleep easier tonight than I have for sometime."

Howard Buckhout, secretary of the Eddy Paper Company, also expressed his approval of the transaction, declaring it was the best thing that could be done, and save anything.

Rumor Connects Mr. Rosenwald with Deal

No intimation was given by either Mr. Blaney or Mr. Buckhout as to the identity of the Chicago parties interested in the new company. Mr. Buckhout stated that he understood that two men prominent in banking circles are included, while two others, interested in the paper industry, are also included. Rumors for the past two or three days have connected Julius Rosenwald, of Sears, Roebuck & Co., prominently with the concern. Just to what extent his influence will carry is not known at this time.

Mr. Blaney, in addition to the above statement credited to him, also announced there will be no change in mill management and that L. Sterritt will be retained at his post.

Growth of Firm Spectacular

The growth of the Eddy Paper Company has been spectacular in the extreme. It was founded January 30, 1906, with a capital of $18,500. The late Jacob Gumbinsky and his son, Oscar Gumbinsky, purchased the old French interests at Three Rivers, rebuilt the machine and started on an upward career.

Expansion was rapid. Some years later the plant of the defunct Oscar Felt and Paper Company, at White Pigeon, a one machine mill, was taken over at a very small proportion of its actual value. Another machine was added to the White Pigeon plant, also a coating plant and a box factory until in 1919 the capital stock had advanced to $750,000. This was increased to $1,750,000, partially by stock dividends and partially by the sale of new stock.

The biggest jump was made at this time when the concern voted to incorporate with an authorized capital of $15,000,000. Of this amount, $12,000,000 was to be common stock and $3,000,000 preferred. A 400 per cent stock dividend carried the outstanding common to $7,000,000, while the preferred, a 7 per cent issue, was put on the market. It enjoyed a ready sale, nearly $1,750,000 being disposed of in the next twelve months.

In this conjunction the concern began the erection of an immense board mill at Three Rivers. Plans were prepared for a four machine mill. Two 126 seven-cylinder machines have been installed and a large container plant also erected. This increased the daily output from 200,000 pounds to 600,000 pounds of board.

No sooner had these enormous improvements been effected, than the concern, in common with all other board mills throughout the country, suffered from the slump in business.

Finance Problems Became Serious

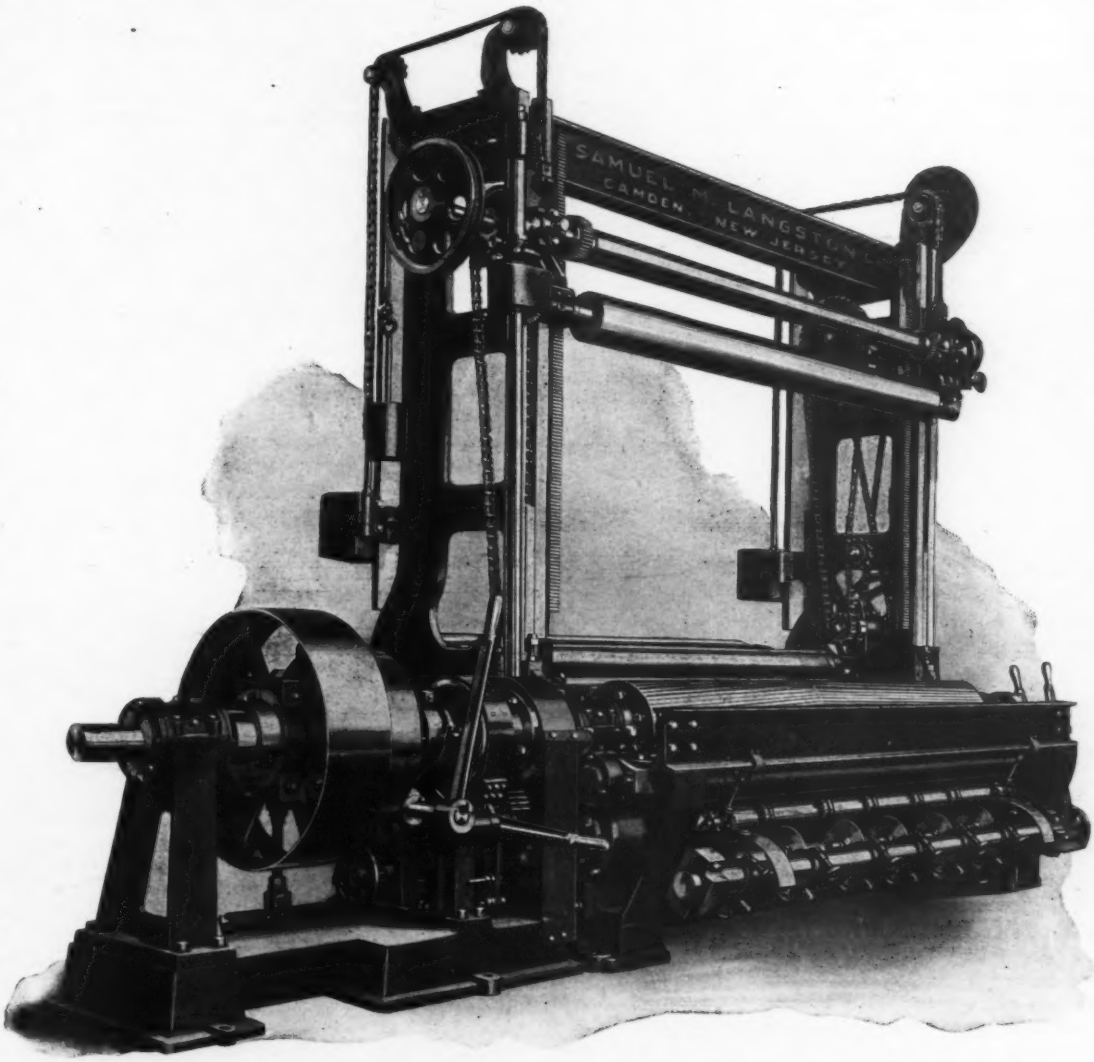
The problem of adequate finances became serious. In April, 1921, a $1,250,000 bond issue was floated to tide the concern over the rocks. Frank H. Milham, president of the company, also president of the Bryant Paper Company, died May 23, 1921. Oscar Gumbinsky was elected his successor. This immediately led to the resignation of Charles E. Nelson, general manager. He was succeeded by A. B. Thomas. This change benefited little and the next move was to elect Charles A. Blaney, as successor to Oscar Gumbinsky. This action was taken at a special stockholders meeting, held in January, 1922.

Mr. Blaney, sensing the need of additional working capital, attempted to increase the bond issue from $1,250,000 to $2,250,000. This venture failed. Stockholders refused to subscribe to the bonds. A big mass meeting was held at the Chamber of Commerce rooms in May. A crowd that taxed the capacity of the auditorium listened to an impassioned appeal for financial support, but the bonds did not move as hoped.

Immediately following the annual meeting the latter part of June, General Manager Thomas tendered his resignation, the result of a disagreement with President Blaney. L. S. Sterritt was engaged to fill the vacancy.

Another effort at complete refinancing was tried in July. This provided for a holding company, the stockholders, common and preferred to surrender their stock in the Eddy Paper Company for common stock in the holding company. Creditors were to be paid in 7 per cent cumulative preferred in the holding company. This plan also failed.

XUM



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Balanced rolls and shafts, with ball and roller bearings mean high speed.

Heavy construction means long life.

SAMUEL M. LANGSTON COMPANY
CAMDEN, N. J., U. S. A.

STEADY DEMAND IN TORONTO FOR PAPER AT FIRM PRICES

General Tone of the Industry Is Stronger Than It Has Been in Months and All Factors Seem Very Favorable for a Considerable Expansion in Demand After the First of the Year—Whalen Pulp & Paper Mills, Ltd., at Swanson Bay, B. C., Resume Operations—Canadian Bureau of Envelope Manufacturers Is Organized With Headquarters at Toronto.

[FROM OUR REGULAR CORRESPONDENT.]

TORONTO, Ontario, November 27, 1922.—A steady trade is evidenced in the paper business. Values are now pretty well stabilized and buying is gradually expanding although there is no disposition to buy heavily before the first of next year as wholesalers desire to have as low a stock as possible at the inventory period which is only a month away. The general tone of the industry is stronger than it has been for months and, while there are weak spots and ups and downs in the receipt of orders and in the showing made week by week by salesmen, still, on the whole, everything is progressing favorably. News print is in very active demand and book and writing papers are having a good call. Other lines are moving freely and coated paper producers say that they are getting more orders than they have for some time. There is some talk of an increase in prices owing to the increasing price of casein and other raw materials. The demand for all kinds of pulp continues to strengthen and prices are firm.

Whalen Company Extends Operations

Hon. T. W. McGarry, of Toronto, who is president of the Whalen Pulp and Paper Mills, Ltd., reports that the plant of the company at Swanson Bay, B. C., has resumed work and that 250 men are employed. The pulp mill will turn out about fifty tons a day of sulphite pulp. In all the company will be able to produce about 250 tons of pulp daily with the three plants running at Port Alice, Wood Fiber and Swanson Bay.

Bureau of Envelope Manufacturers

The Canadian Bureau of Envelope Manufacturers, has been organized with headquarters in Toronto, to develop the envelope paper industry in its different departments, to foster trade and reform abuses, to promote the standing and a better feeling among the producers and to settle any differences by arbitration. Among the incorporators of the organization are Archie G. Parker, Edward H. Ellis and W. S. Hulbig of Toronto, C. B. Martin of Hamilton and Robert W. Elliott of Montreal.

Several Companies Incorporate

A charter has been granted to the Strathcona Paper Company, Limited, with head office at Strathcona, Ontario, to manufacture and deal in paper products. The company has for some years been making sheathing papers and board and turning out about thirty tons a day. Heyes Bros. Paper Box Company, Toronto, has also been granted a charter with a capital stock of $40,000, to make, sell and deal in paper and other kinds of boxes.

Great Lakes Co. May Get Power

The three and a half million dollar industry of the Great Lakes Pulp and Paper Company, Port Arthur, Ont., has been held up because of the disagreement with the Provincial Hydro-Commission on three clauses. As a result of a recent conference between the commission and I. F. Hellmuth, K. C. representing L. A. Alstead, promoter of the Great Lakes Company, two of these clauses have been settled satisfactorily. The first relates to the provisions for arbitration and the second is in regard to the $400,000 bond required by the Hydro. The bond is to be reduced by the company undertaking to pay its power bill three months in advance. The third clause of disagreement has not yet been settled and this is a rather knotty one. It refers to the company's demand for a mutually enforceable contract.

Ritchie & Ramsay Put New Product on Market

Ritchie & Ramsay, Limited, coated paper manufacturers, Toronto, who established the first coated paper plant in Canada thirty years ago last month, report business as being good at the present time. They have just put on the market a new, high grade, coated paper that folds and prints well and which is known as R. & R. coated folder. The body stock is composed of rags and No. I bleached sulphite, giving the necessary strength and folding qualities and particular attention is devoted to the coating in order to produce a resilient sheet that will give the results desired for direct-by-mail advertising and other purposes.

Soo to Secure New Industries

Sault Ste Marie, Ont., where one of the units of the Spanish River Pulp and Paper Mills is located, is about to land several new industries. One of the new concerns will use a by-product of pulp. The E. B. Eddy Co., of Hull, Inc., will also consider the Sault when they take up the matter of establishing a branch factory for the manufacture of matches, so the Board of Trade is advised in a letter from George H. Millen, president and general manager of the company.

Permanent Liquidator for Nipigon Mills

G. T. Clarkson, of Toronto, has been appointed permanent liquidator of the Nipigon Fibre and Paper Mills of Nipigon, Ont., which have been shut down for several months. The total liabilities are given as $561,467, comprising admitted claim $7,243; unsettled ordinary claims $313,713; unsettled preferred claims $2,034; unsettled secured claims, $109,687; and possible liabilities on which no claim has been made, $137,000.

Paper Mills Favor Water Transportation

The superiority of Sault Ste Marie as a shipping point is well demonstrated by the fact that the Spanish River Pulp and Paper Mills are able to ship news print by water to Chicago, Milwaukee, Detroit, Toledo or Cleveland, so that the paper is laid down within one week after the commencement of loading at any of the company's three plants at the Sault, Sturgeon Falls or Espanola. Rail shipments have heretofore been the rule of the Spanish River Mills. Water transportation will be used more extensively in the future because of the lower costs and less danger of accident. The Spanish River Mills now have fourteen machines in operation, five at the Sault, six at Espanola and three at Sturgeon Falls, Ont. The company has just completed the building of an electric generating plant at Sturgeon Falls.

Notes and Jottings of the Industry

The first run of news print from the new unit of the Fort William Paper Company, at Fort William is expected to be made about the first of the year. The machinery is now arriving regularly and being placed in position by a large force of men.

S. J. Frame, of Toronto, secretary of the Canadian Paper Box Manufacturers' Association, was in Boston recently where he delivered an address on the inception and work of the Toronto Carton Club.

At the Royal Winter Fair held during the past week in Toronto, an excellent exhibit was made by the Canadian Vegetable Parchment Company of Merritton, Ont., consisting of butter wraps, box liners, cooked meat wraps, milk can tops, lard pail covers, shredded parchment for packing, etc. J. W. Elliott of the sales staff of the Victoria Paper and Twine Company, selling agent for the firm was in charge of the display.

Ed Silver has been appointed superintendent of the paper mill of the Abitibi Power and Paper Company at Iroquois Falls, Ont. He has been in the service of the company for seven years.

XUM

Itemized Cost Of A Pipe System
Cost of Pipe (Cheapest) 13%
Fittings, Valves, Cocks, Gaskets, etc. 30%
Supervision, Overhead and Miscellaneous 17%
Shopwork, Threading, Bending, etc. 13%
Labor of Installing 20%
Extra Cost of Byers 7%
Extra Life Of Whole System Insured By Using Byers Pipe
100%

Saving $100.00 For Every $7.00 Invested

The value of rust-resisting pipe like Byers is never better demonstrated than when comparing its extra cost with the saving it effects. For it is not only a question of replacing the pipe itself if it rusts out, but the heavy cost of labor, ruined fittings, and other items in the system. (See diagram).

No pipe system can long survive if made of pipe lacking the required rust-resistance. Pipe is but a small part of the cost of such a system, yet it is the *one* part which is most subject to destruction. This is so because of the large surfaces of thin metal exposed to continuous corrosive attack. And when destroyed by rust, the pipe pulls the whole system down with it, causing a replacement expense exceeding the cost of the entire first installation.

Byers Bulletin No. 38, "Installation Cost of Pipe," contains cost analyses of a variety of plumbing, heating, power and industrial pipe systems, with notes on corrosive effects in different kinds of service. Send for a copy.

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GENUINE WROUGHT IRON

Look for the Name and Year rolled in every length

PHILADELPHIA PAPER SALES GROW IN SIZE AND NUMBER

Character of All the Transactions Evidence a Sound and Satisfactory Market—Slight Improvement Also Is Shown in Varieties of Paper Stock Which Have Been Rather Quiet Recently—Plea for Closer Co-operation Between Active and Associate Members Is Made at Bi-Monthly Meeting of Typothetæ—Paper House of Pennsylvania Issues Interesting Bulletin—Many Sales Campaigns.

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, November 28, 1922.—Sales steadily have increased both in number and in average size, the character of all the transactions being that of a sound and wholesome market with every evidence of continuance and with the only limitations naturally arising from the close of the year. But one year's close necessarily means the beginning of another and the application to the paper trade has been the receipt by the fine paper division of a very large volume of business from the blank book makers and commercial stationers for their needs for the year's opening. Railroad corporations, financial institutions, insurance companies and other large purchasers of blank books and forms, are placing their orders for new year delivery on a scale which exceeds anything experienced in the last two years. There is no approach to recklessness in buying and in view of what generally is regarded as a stabilization of prices no purchases are being made in extended anticipation of increases in cost. The orders which are flooding in, however, indicate on the part of the buyers entire confidence in the future by their size and their character. Demand from the printing industry for fine papers steadily is growing with the first evidences during the week of rush orders to fill belated requirements.

Some Improvement in Paper Stocks

A slight improvement was experienced during the last seven days by the paper stock dealers in the two grades which, during the last few weeks, quieted down in demand and grew rather soft in price—old news and mixed and common papers. The largest local consumer during the week increased his price on old news by one dollar a ton, a condition ascribed by the trade to the disposal of the large stocks which previously had been gathered up. It is still extremely difficult, almost impossible, to send through stock except on the main lines of the two carriers, which terminate here and for that reason the stock business is for the present at least rather circumscribed.

Strong Plea for Closer Co-operation

A strong plea for a closer co-operation between the printing or active members and the associate members of the Typothetæ was made at its bi-monthly meeting on Tuesday night of last week at the Meridian Club before an attendance of about 100 members. Present at the meeting were representatives from nearly all the Philadelphia fine paper distributors who are members of the Paper Trades Division of the Typothetæ and they heard with pleasure the plea of President William T. Innes that printers should give their first preference to their associates in the organization and in order to make this more readily possible, the Typothetæ has issued a special list of these associates so arranged that it will always be before the printer when placing his paper order. The members of the division are as follows: Atlantic Paper Company, 1011 Chestnut street; Frederick S. Balch, 126 No. 4th street; Chas. Beck Company, 609 Chestnut street; A. S. Datz & Son, 16 So. Marshall street; Garrett-Buchanan Company, 18 So. 6th street; Edward R. Grossmann, 127 No. 5th street; A. Hartung & Co., 506 Race street; Lindsay Brothers, 804 Sansom street; Molten Paper Company, 25 South 6th street; Paper House of Pennsylvania, 28 No. 6th street; Raymond & McNutt Company, 825 Walnut street; Riegel & Co., Inc., 46 No. 6th street; D. L. Ward Company, 28 South 6th street; Whiting-Patterson Company, 314 No. 13th street, and Wilcox-Walter-Furlong Paper Company, 231 Chestnut street. At this meeting, President Innes formally announced, what was printed in these columns last week that there is under way a great celebration of all the branches of the graphic arts in Philadelphia under the auspices primarily of the Paper Trade Association of Philadelphia and of the Typothetæ of Philadelphia, which organizations, however, are to be supplemented by such as choose to join from the other branches of the graphic arts. Said he, "We had a get-together meeting the other day, the printers and the paper people, and we were of one mind. We printers and the paper men once so often have been getting together in our full dress suits an stiff shirts and have been telling each other how good we feel and that sort of thing. Now it is proposed to have a big night where all formality will be cut out and where all the representatives of every branch of this important graphic arts industry can get together, have a bite, but spend some time talking with each other face to face, learning what good fellows the others are, and then of listening to at least two distinguished speakers. I know there are many instances of men who have done business with each other for years and probably talk to each other every day, but who never have met and who will be glad of an opportunity such as we have in mind. We propose holding this meeting in mid-February and we are at work on it already so that everyone will have ample time to make all arrangements, for we intend to have it the biggest gathering of its kind ever held and one which will emphasize the dignity and the importance of the graphic arts in their broadest interpretation. You printers will recall what a pleasant session we had with the paper men early this year, and the meeting in prospect is the direct result of those happy times. I believe that the gathering as proposed will prove to be an annual feature in this city and I believe furthermore that the Philadelphia precedent will be followed by others of the larger cities throughout the United States."

The principal speaker of the evening was Norman T. A. Munder, the widely known Baltimore printer. During the last two months, thirty new members have been added to the Typothetæ and for their benefit, Secretary-Manager Heath outlined its activities. In the course of his statement he said: "The Waste Paper Division now has a membership of about 75. Our contractor is collecting about 60 tons of waste each month and we distribute $1,500 a month to the members for their waste which we sell at top prices. The Credit and Collection Bureau has in the neighborhood of 8,000 names of buyers of printing with their ratings." Mr. Heath said that membership in the Paper Trades Division was now 15 and that frequently paper distributors ask the Typothetæ for credit ratings on its own members or on other printers and that this information always impartially was given.

An Interesting Bulletin

In the current issue of the *Bulletin* of the Paper House of Pennsylvania published monthly at 28 North 6th street, first place both in illustration and in text is given to the story of "Champion-The World's Largest Producer of Coated Papers." An interesting history of the Champion Company is given together with a convincing exposition of the scrupulous care exercised to produce an absolutely uniform sheet. In a review of "trade conditions as they appear today" the *Bulletin* says, "Although *Dun's* review, Babson and other leading authorities agree that general business is in very excellent condition, it would seem that the paper business is full of cross currents and eddies. As a whole, we would say that the paper business is good. Here and there we find mills looking for business. We gather from conversations that most of our printer

(*Continued on page* 38)

The Beloit Cutter

A machine evolved for the heavily exacting needs of the Board and Container Trade

A Cutter with years of experience packed into it.

BELOIT IRON WORKS

BELOIT, WISCONSIN

Recent Incorporations

INTERBORO PAPER AND TWINE MILLS, Brooklyn, New York. Capital, $15,000. Incorporators: L. D. Adolph, E. Weinberger, L. Goodman. Attorney, J. B. Boudin, 110 West 40th street.

ENVELOPE MANUFACTURING CORPORATION, Manhattan, $25,000; J. F. Oleary, E. W. Rose. Attorney, W. J. White, 7 Pine street.

ROLL LABEL MFG. CORPORATION OF AMERICA, Manhattan, New York. Paper goods, etc. Capital, $10,000. Incorporators: F. and J. Shakum, F. Scott. Attorney, L. Cheuer, 2378 3rd avenue.

A. B. MASSA PAPER CORPORATION, Manhattan, New York. Capital, $25,000. Incorporators: A. B. and L. V. Massa. Attorneys, Knox & Dooling, 37 West 43rd street.

THE PACIFIC STRAW PAPER AND BOARD COMPANY, Vancouver, Washington. Capital, $500,000. Incorporators: Charles F. Schwab and George A. Sweet.

CALCASIEU SULPHUR COMPANY, Wilmington, Del., Capital, $2,000,000. Corporation Trust Co. of America.

QUEENS PAPER COMPANY, Queens, New York. Capital $20,000; Incorporators C. and S. Freedman, W. Schwartz. Attorney, D. M. Freedman, 263 Broadway.

WALTER-SHUTTLEWORTH, INC., Manhattan, New York. Deal in paper products. Capital, $150,000. Incorporator: E. G. Shuttleworth, Shore Road and 93d street, Brooklyn.

PREMIER PAPER COMPANY, Manhattan, Capital $50,000; Incorporators, S. Greenberg, J. and J. G. Gold. Attorney, S. S. Kogan, 299 Broadway.

PHILADELPHIA PAPER SALES GROW

(*Continued from page 36*)

friends are busy and yet here and there, we find one who complains of being dull, Nevertheless, prices are on a sound basis for some time to come."

Many Sales Campaigns

Trade conditions were enlivened during the week by an unusually large number of sales campaigns which were being conducted. The Smith Paper Company made a drive on its new line of fiber paper. The West Virginia Pulp and Paper Company offered a new envelope manila product at a very attractive price. The Continental Bag and Paper Mills Company was active in its campaign announcing, however, that wants of the jobbers would be met through its Philadelphia distributor, the Huff Paper Company. The Chemical Paper Company also actively was in the market.

General News of the Trade

E. H. Warborton of the sales organization of the Paperhouse of Pennsylvania spent last week as a member of the Strathmore Paper Company class in salesmanship.

Miss Agnes Garrett, daughter of Sylvester S. Garrett, paper jobber, 3rd. and Spruce streets, last week won first prize in competition with seven others in an elocutionary contest in the Ashbourne Presbyterian Church conducted under the auspices of the W. C. T. U.

The adaptability of the Academy Bond made by the Valley Paper Company and carried by the Wilcox, Walter, Furlong Paper Company in 9 colors and white is illustrated in a two color broadside issued during the week by the company. Attached to it is a swatch of samples showing the full line stocked.

The eleventh barge has been added by the Universal Waste Products Company to the fleet which it operates for the purpose of bringing stock of mixed and common papers and others from New York and from several gathering points along the Delaware River, Philadelphia to its own wharf, Callowhill street, Schuykill and thence to the plant of the Philadelphia Paper Manufacturing Company in Manayunk from whence are shipped on these barges on their return trip, stocks of boxboard. The Universal plant occupies a large acreage at 25th and Callowhill street, but the premises are on a site which shortly is to be condemned by the city of Philadelphia for municipal purposes and hence it is under the necessity of finding a new location, preferably one on the river frontage. The Universal Company now has piers at 78 South Wharf and at the foot of Allegheny avenue in addition to the Callowhill street wharf on the Schuylkill River.

While the week following the notable meeting held under the auspices of the five Philadelphia Strathmore distributors, the Raymond & McNutt Company, The Charles Beck Company, the Paperhouse of Pennsylvania, A. Hartung & Co., Inc., and The Thomas W. Price Company was one in the course of which many letters of appreciation were received, last week, brought out most satisfactory results in the shape of orders. But more pleasing yet is the evidence which all the distributors say they have received of the cultivation of a larger demand for high grade papers due to the inspiration sent out at this meeting. The distributors say that unquestionably the propaganda for better paper for better printing has been successful and that the Strathmore meeting was a large element in the improvement. During the week, M. H. Grassly of the Strathmore Company visited here and perfected the program touched on by Colonel Franklin at the Strathmore meeting and the result of which is that henceforth a complete assortment of all the Strathmore products always will be available in this city in the stock rooms of all or of some of the distributors. Arrangements have been made whereby any Strathmore line of which one distributor temporarily is out can be replenished from the stock of the other.

A jury in the Court of Common Pleas No. 2, Judge Reno of Lehigh County substituting found a verdict last week for $20,538.45 against the D. L. Ward Company in the suit brought against it by Alex Ehmling. Mr. Ehmling formerly was in charge of one of the Ward department and the suit was based on the alleged violation of contract. The case will be appealed.

Riegel & Co. have organized a distinct envelope department and it has been placed in charge of Morton J. Porter, who has been with the organization for some time and who succeeds Norman Jenkins, who up until two months ago specialized on envelope sales. Terrence Horgan, an old employee of the firm was this week placed in charge of the envelope desk.

C. L. La Boiteaux Co. Changes

CINCINNATI, Ohio, November 27, 1922.—The C. L. La Boiteaux Company announces that J. A. Barbara has recently been made manager of its New York office. Mr. Barbara previously was with the concern in Cincinnati for ten years prior to going to New York. Since Mr. Barbara has taken up his new duties, he has made some very rapid strides in lining up business, and because of the expansion, has found it necessary to take on two additional men. One of these, Donald Wyman, is thoroughly schooled in the manufacture of paper board products, and the other, Robert Johnson, is also thoroughly familiar with all grades of paper box board and is very well known in the Eastern territory.

R. B. Williams of the Cleveland office of the C. L. La Boiteaux Company, has also found it necessary, because of increasing business, to take on an additional man. Balfour Phelan, the new man, has been associated with the selling and manufacturing end of the business for a number of years, both in the East and the West, and Mr. Williams and Mr. Phelan represent a team that it is figured it would be hard to beat.

An additional man also has been taken on in the Cincinnati office of the company.

The Chicago office is under the able management of H. G. Williams, assisted by Hilmer Maher. Beginning also this month, Mr. Dooty will be connected with this branch to specialize particularly in Fibre Container products.

Thursday
Nov. 30

THANKSGIVING DAY

Be Thankful for

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Our Brands

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- MIAMI KRAFT
- RADIO KRAFT
- DOMINO WHITE
- LAWRENCE SUGAR KRAFT
- CANDY BOND

Square and Flat
- DRAGON KRAFT
- DERBY WHITE
- CANDY BOND

Our Kraft Bags

ARE MADE OUT OF THE HIGHEST QUALITY NO. 1 PURE SULPHATE KRAFT PAPER.

Our White Bags

ARE MADE OUT OF THE HIGHEST QUALITY SLOW-COOKED MITSCHERLICH SPRUCE SULPHITE PAPER.

James Lawrence, President

The Lawrence Bag Company

Miamisburg, Ohio

Obituary

Aaron Bagg, Jr.

HOLYOKE, Mass., November 25, 1922.—Aaron Bagg, Jr., 83, died at his home at West Springfield last week. He had for a half century and more been in close touch with the paper industry of Holyoke. He was president of the Parson Paper Company, of which his father, Col. Aaron Bagg, was one of the founders. It was in the early stages and success of this industry that Mr. Bagg accumulated a large part of his fortune. Mr. Bagg had been failing for some time after a long period of uncertain health.

Mr. Bagg was probably one of the best known men in the town of West Springfield, where he had spent his life and was one of the important financial men of the Connecticut Valley.

He was a director of the Millers Falls Paper Company and of the Third National Bank of Springfield, a trustee of the Springfield Five Cents Savings Bank and of the Whiting Street Fund.

Mr. Bagg had long been prominent in State and town affairs. He served one term in the Legislature in 1890 and before that had been one of the town's selectmen. He had also served as auditor and his advice was frequently sought on financial matters. He was one of the committee chosen by the town to build the new junior high school.

Mr. Bagg was the son of Aaron and Hannah Mather Bagg, one of six children, Hannah Mather, Lucy Maria, Rufus Mather, John Sullivan and Edward Parsons Bagg. He was twice married. His first wife was Mary Heath, who died in 1897. They had two daughters, one of whom, Mrs. Henry Leary, lives in New York. The other, Edith, was a talented singer, who studied much abroad. She died three years ago. In 1899, Mr. Bagg married Nellie W. Fox, who survives with four daughters, Beatrice, Barbara, Phyllis and Shirley. He also leaves a granddaughter, Marion Leary of New York; Edward Parsons Bagg of this city is the last of the family left.

Kennebec and Cushnoc Trustees Sustained

[FROM OUR REGULAR CORRESPONDENT.]

PORTLAND, Me., November 27, 1922.—Judge John A. Peters of the United States District Court denied a petition for the removal of the trustees of the bankrupt Kennebec Paper Company, and the Cushnoc Paper Company both of Augusta, last week. The trustees whose course the judge sustained are Walter S. Wyman of Augusta, Frank B. True, of Portland and Edwin M. Frye of Harrington, who took charge of the affairs of the company by order of the Federal court on June 2. The petitioners whose application was dismissed were the American Mutual Liability Insurance Company, the Eastern Pulpwood Company, and the Great Northern Paper Company acting as creditors.

In his decision, Judge Peters said: "These trustees are men of experience. They have carried on their work with efficiency and in a satisfactory manner to me, as well as successfully, I should judge. I find that they have in no respect violated their trust, and they have operated efficiently. They are in no way guilty of any impropriety nor have they any in view. Mr. Carter has urged that there should be two sets of trustees so that the business of both mills may be carried on separately. I have not been shown that they could be run in bankruptcy more advantageously than at present under one board of trustees. If at any time it develops that two bodies would be more beneficial, the matter can be presented to me."

Testimony taken at the hearing showed that the finances of the two companies had been revolutionized during the period of the receivership and during the administration of the trustees from the beginning of June to the present date. Joint losses of the twc companies prior to the bankruptcy proceedings last June had been running between $15,000 and $20,000 a month. The loss has been changed into a profit and in October the net profits for the two mills amounted to more than $13,000 after depreciation and taxes.

It was alleged by the petitioners that separate boards of trustees should be provided for the two companies owing to the fact that the interests of the individual corporations are by no means common and that it was not fair to expect one board to manage the affairs of concerns with conflicting interests.

Richard H. Smith of Pelham, N. Y., formerly president of the Cushnoc Company, testified that his salary as president had been $50,000 a year and that he also received $12,500 a year from the Kennebec Paper Company. The Cushnoc Company was said to be doing a gross business of $9,000,000 a year during the war. The affairs of the Cushnoc and Kennebec companies were mixed up with the Eagle Paper Company of Richmond, Va., which is now out of business.

The trustees testified that separate boards would be inadvisable for the two companies. They felt that two boards would be constantly disagreeing over matters that concerned both companies, such as purchase of power and various other co-operative arrangements, made possible by the close proximity of the two big mills on the Kennebec river.

W. F. Whiting Speaks Before Printing Craftsmen

[FROM OUR REGULAR CORRESPONDENT.]

HOLYOKE, Mass., November 27, 1922.—William F. Whiting, president of the Whiting Paper Company was the principal speaker at the first "Ladies Night" of the Connecticut Valley Club of Printing House Craftsmen held Wednesday, at the Hotel Nonotuck. About 200 people were present at the diner preceding the address and remained for dancing afterwards which lasted well into Thursday morning. John J. White, treasurer and general manager of the Whitmore Manufacturing Company and president of the club, presided at the meeting.

Mr. Whiting said that he thought that European conditions were not generally so bad as painted. He expressed himself as being against a league of nations saying that because of the showing of the United States in the World War, Europe was very anxious to have the United States join such a league so that they might have something to say as to what we might do over here but that he believed that if we, for instance, were to make any recommendations as to the boundary lines of the European countries, they would tell us that they were able to manage their own affairs.

The business men will rebuild Europe, Mr. Whiting believed and it is business that Europe needs. The real work Mr. Whiting said, is done by the evolution of thought.

He spoke of the labor unions and the capitalistic associations and said that although both were good, if either side should eliminate the other, both would lose. He deplored the general light in which the capitalist is viewed and said that he is very necessary to the development of a country which could not develop without him. It is not in the hostility of warring camps that prosperity is found, but in understanding each other's problems.

Tayloe Paper Co. Opening at Tulsa

MEMPHIS, Tenn., November 27, 1922.—The Tayloe Paper Company has opened a branch house at Tulsa, Okla. The concern thirty days ago took a two years' lease on 125 x 140 square feet of trackage warehouse space and placed orders for stock, some of which has already been received. The company expects to have by about December 10 a practically complete stock which will consist of a general line of paper for printers, and also a line of wrapping paper, paper bags, toilet paper, etc.

W. P. Beene who has represented the Tayloe Paper Company in Tulsa for a number of years, is manager of the new house. Robert Reeder, formerly with the Memphis house of the firm is in charge of the Credit Department. The firm will work a number of road men out of the Tulsa house.

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CHRISTIANIA NEW YORK GOTHENBURG

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New York Trade Jottings

The Whitmore Manufacturing Company has reopened its New York office, with William McNicoll in charge. The new office is at 140 West 42nd street.

* * *

A petition in bankruptcy has been filed against the Supreme Paper Box Company, Inc., 10-12 Forrest street, Brooklyn, by William Ginsburg for $2,000.

* * *

Alfred Bunge who has been connected with the paper and pulp trade in New York for about fifteen years has become associated with the wood pulp department of M. Gottesman & Co., Inc., 18 East 41st street, New York.

* * *

The Whitaker Paper Company, 48-52 Great Jones street, New York, has issued a new net price list, the firm having decided recently to stop circulating a long list. The new list is complete in every respect and is standardized to fit into all printers' standard guides.

* * *

One of the interesting features at the convention of the Connecticut Valley Division of the Pulp and Paper Mill Superintendents' Association was the exhibit of the Aluminum Bronze Bull Dog Jordan Filler, made by Shartle Bros. Machine Company of Middletown, Ohio. The exhibit was in charge of D. H. Montville, the New England representative of the company.

* * *

The Triangle Card and Paper Company, Inc., of 706 Park avenue, Brooklyn, is planning to move to larger quarters at 174 Fulton street, Brooklyn, on or about December 15. This paper company was started in Brooklyn and has operated in Park avenue for the past six years. The new home will be located downtown near City Hall, and will occupy nearly three times the present floor space.

* * *

The price of the $800,000 issue of Bedford Pulp and Paper Company, Inc., first mortgage sinking fund 6½s, due in 1942, is par. Announcement of the prospective offering was made last week on behalf of Ames, Emerich & Co., bankers for the issue. Proceeds from the sale of bonds will be used for the acquisition of the entire capital stock of the General Paper Company, Inc., and for other corporate purposes.

* * *

The Geo. T. Johnson Company, Inc., of New York City, Boston, Mass., and Fulton, New York, manufacturer of toilet paper, paper towels and economically serving fixtures, announce the acquisition of Mr. Frank H. White, as general sales manager for Greater New York. Mr. White has been in the line for many years and although of no relation, he was New York manager and representative of White-Washburn Company, Inc.

* * *

S. J. Hall, forest engineer for James D. Lacey & Co., and party recently returned to the New York office from a six weeks' cruise in the upper peninsula of Michigan. The examination was made for the Lake Independence Lumber Company of Big Bay, Mich., for which a bond issue of $1,000,000 has recently been floated by the Lacey Securities Corporation. Conditions in this region are reported by Mr. Hall to be exceptionally good as to lumber demand, all mills having orders ahead. The labor situation, however, is serious, sufficient men to handle the woods operations being available only at top prices.

* * *

Parsons & Petit, selling agents for the Freeport Sulphur Company, 63 Beaver street, have just published a card, in relation to sulphur or brimstone, showing on one side pictures of the loading, at the mines and docks, Freeport, Tex., with a short description of the origin and mining, in the United States and Sicily, statistics for the thirty-year period, 1892-1921, inclusive, embodying production, imports and exports of the United States, production and exports of Sicily, and on the other side, channels of consumption, with domestic exports to the different countries, during the years 1918-1921, inclusive, also 1913, which can be hung in your office, for reference.

Black River Water Supply Threatened

WATERTOWN, N. Y., November 27, 1922.—Industry along the Black River valley and its tributaries will be brought to a standstill this winter unless rains occur before it freezes up, according to announcement made Monday, by J. V. Baron, chairman of the Board of the Black River Regulating District, head of the Carthage Sulphite Pulp and Paper Company and vice-president and general manager of the Sherman Paper Company.

Mr. Baron said that at the present time there is a fair flow of water but there is no reserve supply. He said that every reservoir in the Adirondacks is empty after having been open for several months to maintain a river flowage for industrial plant operations.

"If we should receive no rain this fall and a severe cold spell should come so that ponds and brooks and even shallow river spots should be frozen solid it would mean the worst shortage of power this section has ever experienced," said Mr. Baron. "It would be a much worse condition than any summer season drouth to date.

"There is practically no snow in the woods now and the ponds and swamps are all dry. If rain is not received before the heavy freezing there will be no water to supply the river flow. It would require a heavy snow fall with a very substantial thaw to overcome the lack of moisture which now exists."

Manufacturers in this section are pessimistic over the outlook for power this winter.

To Sell Mullen Bros. Paper Co.

[FROM OUR REGULAR CORRESPONDENT.]

ST. JOSEPH, Mich., November 27, 1922.—The Farmers' and Merchants' National Bank, receiver of the Mullen Brothers Paper Company is offering for sale at 2 o'clock on the afternoon of December 6, at public auction subject to confirmation by the court the following:

(a) Lot No. 1. All land, buildings and equipment, together with the tenements and hereditaments appertaining thereto, comprising the complete paper mill of the Mullen Brothers Paper Company, together with the good will of the said Mullen Brothers Paper Company.

(b) Lot No. 2. In bulk, consisting of all raw, in process, and finished stock on hand.

(c) The interest and equity of the Mullen Brothers Paper Company under an executory contract of purchase for what is known as the Dock property.

(d) All accounts receivable, patents, trade-marks and causes of action.

The property herein offered for sale may be seen and inspected on application to the Receiver and such property shall be sold free and clear from all liens, claims and incumbrances.

C. L. La Boiteaux Co. Opens St. Louis Office

[FROM OUR REGULAR CORRESPONDENT.]

ST. LOUIS, November 27, 1922.—The C. L. La Boiteaux Company has opened up an office here at 819 Chestnut street, in charge of Elliott Wilson, who for about five years was connected with its Cincinnati office, and for about one year with the Chicago and the Cleveland offices.

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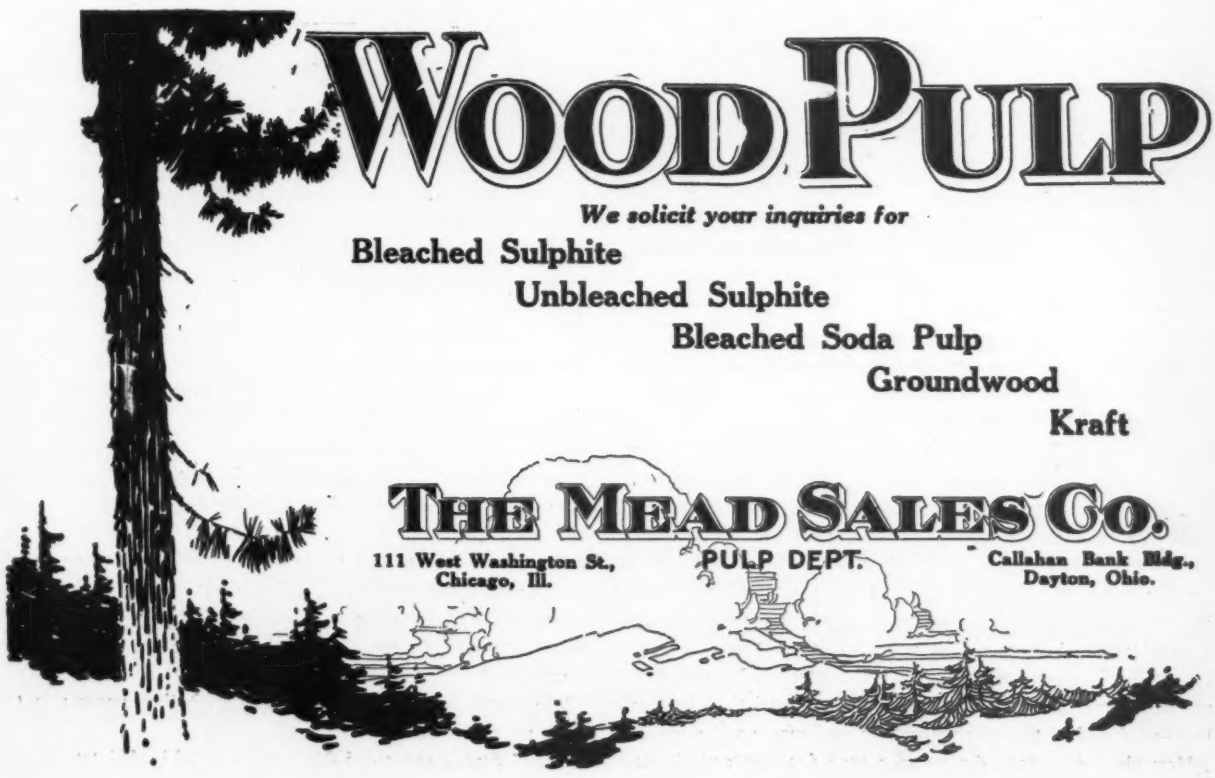

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PULP DEPT.
Callahan Bank Bldg., Dayton, Ohio.

Editorial

Vol. LXXV New York, November 30, 1922 No. 22
FIFTY-FIRST YEAR

Bucking the Law of Averages

In the *Waste Trade Journal* of November 18, there appeared a lengthy, front-page editorial under the heading: "Can Paper Mills Insure Steady Supply of Waste Paper by Breaking the Market?" Several unpleasant allusions were made to paper manufacturers. That the manufacturers are not in earnest, that their past performances are against them and patriotic talk of forest conservation on their part is so much empty mouthing, were among other denunciations of the paper making brotherhood, the ensemble being culminated by a dramatic Ku Klux type of inquiry as to whether these paper manufacturers know that there is a United States Department of Justice that has such practices under its eye.

The old actor, failing to elicit applause from his audience by his super-pathetic rendition of "The Death of Little Nell," seldom fails to get a "hand" as he draws the Red, White and Blue from his bosom, the orchestra plays the Star Spangled Banner and he bows his feeble way off the stage with the lovelight in his eyes. The PAPER TRADE JOURNAL cannot believe that the editorial referred to correctly interprets the attitude of the waste paper trade. After making its appeal for nearly two columns on a strict basis of humanitarianism, then to turn in the last paragraph to the Department of Justice as a weapon designed to make the manufacturers more conscientious, served only to weaken the force of the argument.

There is perhaps no phase of the paper industry that is regulated so automatically and naturally as the paper stock end of it. The competition of the soda pulp market with that of waste paper is necessarily acute enough always to maintain a "balance of power" between the two. Under the present day type of unsentimental business, there is scarcely any danger of manufacturers continuing to pay higher and higher prices for one of these commodities—either waste paper or pulp, while the cost of the other declines proportionally. Yet the *Waste Trade Journal* would have us believe that the book paper manufacturers would criminally collude and maliciously cause thousands of tons of waste paper to be burned, collecting machinery to be put out of gear and packing plants to be shut down. To what end, may we ask? To force waste paper prices to a low level? What would then result? Every book paper mill, every board mill, every consumer of waste paper would enter the market at once to take advantage of the low prices. What stocks of waste paper had not been burned by despondent collectors, would be eagerly snatched up. While the collecting machinery was being geared up again and the cobwebs removed from packing plants, the market value of waste paper would rise—automatically. The Department of Justice would not be referred to then. Forest conservation, patriotism, brotherly love—all fade into this overpowering law of supply and demand.

Meanwhile, soda pulp dealers may have felt that artificial legislation should have been utilized to regain *their* lost foothold. Had not their clientele turned *en masse* to waste paper as their manufacturing stock? Were not the manufacturers themselves trying to show they had the upper hand? Was it not criminal collusion to slight their friends in the pulp market?

A chart showing the comparative rise and fall in values of the paper stock and soda pulp markets would indicate that each alternately holds sway in point of production and demand. To legislate in favor of one would be prejudicial to the other, but it would do something else. If manufacturers were compelled by law to confine themselves to waste paper, the business would soon become so lucrative that many would be attracted to it. With a fairly constant supply, competition would be extremely keen, price-cutting rampant, and in the long run the trade would suffer. As it is, there are alternate periods of dullness in each source of supply, giving the dealers a breathing spell as well as an opportunity to stock up with their particular commodity in anticipation of the subsequent demand that is as certain to come as a rubber ball is to rebound.

Both waste paper dealers and manufacturers owe it to themselves to be fair with one another in their mental reservations. The *Waste Trade Journal* should be honest with itself as well as with its readers in the waste paper business. Paper mills are not seeking to break down prices in the industry which supplies them with fodder. Most of these mills are owned and operated by men whose intelligence would point out to them the lack of wisdom in such a course.

Personalities and hard words need not be involved in a problem that will solve itself so effectively without them.

Canada's Paper Exports Grow

The exports of pulp and paper from Canada in October were valued at $10,405,433, a small increase over the previous month when the value was $10,332,283. Compared with October, 1921, however, when the value was $8,953,225 this year shows an increase of $1,452,208.

The exports of news print paper for October of this year were valued at $5,811,954 as compared with $5,510,604 for October, 1921, the exports of book paper were valued at $49,035 as compared with $17,718 last year and the exports of other paper were valued at $607,977 as compared with $330,397 last year.

The exports of sulphate pulp for October of this year were valued at $875,876 as compared with $743,693 last year of bleached sulphite pulp $1,432,607 as compared with $459,613 last year, of unbleached sulphite pulp $885,601 as compared with $852,341 last year and of mechanical pulp $742,303 as compared with $1,031,859 last year.

It may be observed that exports of all grades of paper and pulp, except mechanical, show considerable increases over the corresponding month of 1921, so far as quantities are concerned. The fall in prices accounts for the failure of the values to appear in like proportions.

The principal countries of destination of these imports in October were as under:

United States, paper $5,510,897 and pulp $3,170,843 totaling $8,-

681,740; United Kingdom, paper $182,406 and pulp $520,776 totaling $703,182 and other countries, paper $775,663 and pulp totaling $1,020,511.

Pulpwood exports for the month were 93,403 cords valued at $992,934 compared with 94,351 cords valued at $974,560 in September. In October, 1921, the exports were 47,203 cords valued at $587,674.

For the first seven months of the fiscal year, ending October 31, there is a noticeable gain over the previous year both in pulp and paper. For this period in 1922 there was exported news print to the value of $38,702,094 as compared with $36,788,367 last year, book paper, $186,304 as compared with $176,736 last year and other paper, $3,647,239 as compared with $2,281,124 last year, the total being $42,535,637 as compared with $39,246,227 last year.

For the same period of this year there was exported sulphate pulp to the value of $5,331,771 as compared with $4,104,846 last year, bleached sulphite pulp $7,193,809 as compared with $3,666,996 last year, unbleached sulphite pulp $6,396,660 as compared with $4,950,205 last year, and mechanical pulp $5,187,429 as compared with $6,169,618 last year, the total value of all varieties of pulp exported during this period last year being $24,109,669 as compared with $18,891,665 last year.

Exports of pulpwood for the seven months' period were 599,415 cords valued at $6,222,835 compared with 468,591 cords valued at $6,134,459 for the corresponding seven months of 1921.

Government Guarantees Newfoundland Scheme

[FROM OUR REGULAR CORRESPONDENT.]

MONTREAL, Que., November 27, 1922.—Advices just received here from England announce that Sir Richard Squires, Premier of Newfoundland, has concluded an agreement by which the British Government, through the Trade Facilities Board, will gurantee the interest on £2,000,000 for a scheme for the creation of pulp and paper mills in Newfoundland. The Government of Newfoundland proposes to guarantee the interest on a similar amount. Thus the scheme will involve a capitalization of $18,000,000 and it is stated that the mills, which will be located at Bay of Islands, will outrival the famous mills established by the late Lord Northcliffe at Grand Falls. This plant is to be erected by the Armstrong-Whitworth Company of London, England. Mr Coaker, Minister of Marine, in the Newfoundland Government, says of the proposals:

"In my opinion the harnessing of the Humber will mean the employment of 10,000 men within five years. Two thousand five hundreds loggers will be employed annually, solely to provide wood to manufacture one hundred thousand tons of paper annually. I congratulate the people of Newfoundland on the accomplishment of this great industrial proposition."

It is expected that the scheme will be laid before the colony's Legislature on the Premier's return from England.

A discordant note is found in the comment of the opposition press. The *Daily News*, of St. Johns, Nfd., says: "As far as our financial position goes, Newfoundland can bear an additional burden of neither $9,000,000 nor $18,000,000. She cannot afford to pay an added million a year out of her taxes, anymore than she can afford to pay an added half a million dollars. For that matter she cannot afford to incur liability for an additional dollar of expenditure. Our debt has already reached a prohibitive figure, while the annual deficits are so great that any increases in them must mean not only virtual insolvency but the destruction of the country's credit."

For Joint Meeting of Sales and Cost Associations

The suggestion for a joint convention next spring of the Cost Association and the Salesmen's Association of the Paper Industry is an interesting proposition made by Thomas J. Burke, secretary of the Cost Association of the Paper Industry, in a late bulletin of the Salesmen's Association to the paper salesmen of the country.

Mr. Burke points out that the cost of production dovetails into the sales question in every branch of the industry and adds that as sales agents sometimes at the mill see how paper is made, so the cost men of the industry should know something of the principles of salesmanship as practised at the selling end of the industry. He then says:

"I want to take advantage of this opportunity to make the suggestion that the Cost and Salesmen's Associations should hold a joint convention next spring, and thus cement their understanding. After such a meeting the members of the associations should be better able so to direct their work that it may count to the best advantage for their respective organizations.

Reports from different divisions of the Salesmen's Association are as follows:

New England—The New England Division, under John E. A. Hussey, is planning for a splendid meeting in January with the Executives of the New England district. Details of this meeting will be furnished later.

New York—Donald MacLaurin, chairman of the New York Division, is perfecting plans for a series of interesting luncheons. At each of these some prominent paper manufacturer or successful business executive will present constructive suggestions covering practical salesmanship.

Chicago—J. L. Fearing, chairman of the Chicago Division, sends the following notice in regard to the Chicago Division's weekly luncheons.

"At a meeting of the Chicago Division of the Salesmen's Association of the Paper Industry last Monday, it was decided that our regular weekly luncheons will hereafter be held at the Old Colony Club (18th floor Hotel La Salle) every Tuesday at 12:30 P. M., instead of on Mondays."

Customs Service Adopts News Print Definition

The following definition of the term "Standard news print paper" has been adopted by the United States Customs Service, it was announced to a representative of the PAPER TRADE JOURNAL, Tuesday afternoon of this week, by J. R. Hecht, Chief Examiner:

"Standard news print paper is a machine finished printing paper, made from chemical and mechanical woodpulp, the latter largely predominating, chiefly used for the printing of newspapers, usually of a weight approximating 32 pounds to each 500 sheets 24 x 36 inches, but sometimes several pounds heavier."

This definition is identical with that forwarded the Customs Service by R. S. Kellogg, secretary of the News Print Service Bureau, as a result of the statement which had been sent to all Bureau members on October 16, requesting this information.

In commenting upon the adoption of this definition, Mr. Hecht said, "On the face of things, 20 or 25-pound paper would not be ordinary news print, whereas 38 or 39-pound paper, if ordinarily used by newspapers in this country, would still come within the scope of this definition. This paper is usually composed of 75 to 80 per cent ground wood and 20 to 25 per cent sulphite."

United Paperboard Mill at Benton Resumes

LEWISTON, Me., November 22, 1922.—The United Paperboard Company's mill at Benton, has started operations after having been shut down since November 1, 1920. This is the longest time the mill was ever closed. It will afford employment for many who are in need of work and the whistle will be a welcome sound.

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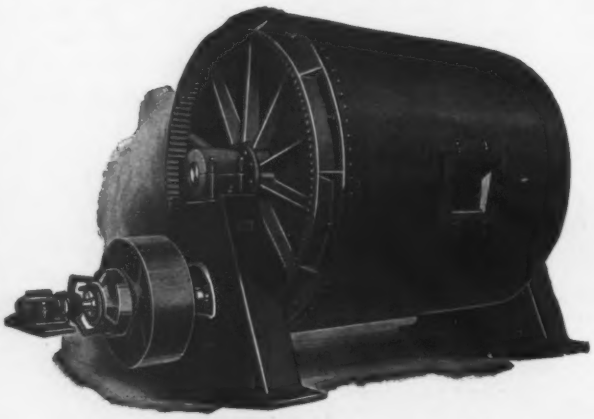

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Section of the
Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Conducted by W.G.MacNAUGHTON, Secretary

DISCUSSION ON PAPER TESTING AT THE FALL MEETING OF T. A. P. P. I. AT DETROIT

(*Continued from last week*)

The following is the report of the sectional meeting on paper testing of the Technical Association of the Pulp and Paper Industry, at the Hotel Wolverine, Detroit, Mich., F. A. Curtis presiding.

CHAIRMAN CURTIS: The Paper Testing Committee has felt that it should standardize the test methods, to get exact data on the testing apparatus, and to pass on to the Technical Association tentative standard methods which might be modified from year to year.

The Technical Association has the responsibility of developing the technical side of the paper and pulp industry. For that reason we are concentrating on a number of test methods and will continue on these during the winter, having in mind the study of the apparatus and their accuracy.

You may ahve a method which you believe good, and another has a different method for the same quality which he also thinks is good. The policy is to work on a co-operative basis and find out which method is better and reach some common ground of standard procedure.

Microscopic Analysis of Fibers in Paper

Due to the work done last year it was felt necessary to get some more definite procedure for fiber analysis, and we collected a considerable amount of data as to different methods. All this data was turned over to H. N. Lee of the Hammermill Paper Co., a member of the committee, who was asked not many weeks ago to prepare a report for this meeting. H. L. Peckham is here to present the report in the absence of Mr. Lee. The report gives two suggested methods. One for mill control work, quick, easy and fairly accurate; and another more elaborate method for more precise and accurate work. If we can endorse them we will send out to the companies operating laboratories, mixtures of fibers of known composition, for the laboratories to study the methods and try them out. The mixtures have been prepared and are ready to send out. The point is to get together and agree so we can turn the results in at the annual meeting. Mr. Peckham.

HAROLD L. PECKHAM: In Technical Association Papers, Series V, June, 1922, page 139, appear the results of a co-operative study of thirty-eight samples of specially prepared mixtures of various kinds of fibers. An examination of these results and the discussion which took place at the sectional meeting on paper testing in New York, April 12th and 13th, 1922, indicate that additional work is desirable. To facilitate this study the Bureau of Standards has been requested to prepare two sets of samples—one of known composition, and one of unknown composition. The mixtures of known composition are to be used in studying and becoming familiar with the several methods; then the composition of the unknown samples will be determined and the results obtained be used as a guide in establishing a standard method.

In the following a brief description is given of the various methods which are in use.

A, *Quick estimation method;* B, *Gravatt;* C, *Spence;* D, *Graff;* E, *Count.*

Where the procedure is identical or nearly so, the description of manipulation is not duplicated.

Sampling. Tear several small pieces of paper of equal size from different parts of the sheet or sheets to be tested. The pieces should be taken from as widely distributed points as possible. Tear pieces into small bits.

Quick Method. Take not less than three small pieces.

Gravatt Method. Determine by superficial examination the type of paper. Apply phloroglucinol, if necessary. Take samples from different parts of the sheet to make weight, as follows:

Ground wood-sulphite mixtures	0.075 grams
Soda-sulphite mixtures	0.050 "
Rag-sulphite mixtures	0.060 "

Tear samples into small bits.

J. N. STEPHENSON: Why the variation in the size of the sample?

G. S. GRAVATT: In different mixtures the fibers are of different size and it takes a different number of fibers to make up a certain amount of paper. We try to keep our microscopic slides as uniform as possible and that was worked out, and we figure these weights would bring, as nearly as possible the same number of fibers on each slide. The ground wood is a smaller fiber and it would take more of those to make the slide uniform; that is, nearly the same number of fibers on the slide as soda-sulphite.

Cooking and Disintegrating. Heat to boiling in 1 per cent NaOH (½ per cent NaOH—Graff), pour off caustic, wash several times with water, then once with 1 per cent HCl and finally with water. Roll the paper into a ball and work between the fingers to loosen the fibers. Place the ball in test tube (or flask) with water and shake until the fibers are completely separated. Dilute, if necessary, until suspension is about 0.03 per cent fiber.

Quick Method. Heat to boiling in denatured ethanol. Take

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pieces out and blot off ethanol with hard filter paper. Bring to boil in water. Do not disintegrate samples.

In regard to the ethanol being used rather than the sodium hydroxid, we feel that it is very satisfactory for the reason that it is very convenient. By using ethanol there is little tendency for any reaction with the Herzberg stain, that is, the coloring is more pronounced with the use of the ethanol being more easily washed out, with no traces left (than with other reagents).

Gravatt Method. Place ball in eight inch test tube with exactly 25 cc. water. Disintegrate by shaking.

Spence Method. After disintegrating dilute, if necessary, so that suspension contains about 0.02 per cent fiber.

Graff Method. After disintegrating dilute, if necessary, until fiber suspension is about 1 to 2500 (0.04 per cent). Fill four eight-inch test tubes four-fifths full of suspension.

Transfer of Fibers to Microscopic Slide. Immerse straight glass tubing, about ¼-inch internal diameter, about 1 inch into dilute fiber mixture. Close upper end of tube with thumb and place contents of tube on a clean slide. Remove water by drying on bath.

"In making up the fiber suspension, use as little water as possible. When the test tube is shaken, clots of fiber will remain on the side of the tube. Remove one of these clots with a needle and place on a slide. Or pour the whole contents of test tube on several thicknesses of filter paper; then remove a bit of the fibers with forceps or needles and place on slide. These methods are suitable if fiber is long.

Quick Method. From each of the pieces of paper remove as small a bit as possible with forceps and place on slide. Separate the fibers with needles. If too many fibers are present remove part by halving, after thoroughly mixing. Finally separate fibers and apply drop of stain. Again separate fibers and put on cover glass.

Gravatt Method. Cut off a 5 cc. Mohr pipette at one end of the graduations, or use straight glass tube of 6 to 7 mm. internal diameter. Take exactly 2.5 cc. of suspension by sucking or by dipping tube into suspension and closing upper end with finger. Place the 2.5 cc. on clean slide and distribute evenly. Dry on electrical hot-plate with aluminum top ¼ inch thick.

(An aluminum top on a hot plate is easier to clean off; it doesn't rust).

Keep surface level and adjust heat so that water does not boil. When water is about two-thirds evaporated, distribute fiber evenly by means of needles and tapping. When dry, the fibers stick. Remove all fibers except a square patch the size of the cover glass near each end. Apply stain.

Standard slides made up in this manner should be prepared and kept on hand unstained. Make up several slides of sample being examined.

Spence Method. Use a glass tube 10 inches long with a 7/32 inch (5.5 mm.) internal diameter, with one end rounded so as not to have sharp edges and the other fitted with a small rubber bulb. Mix fiber thoroughly, insert end of tube two inches below surface, expel two bubbles of air and draw about half an inch of the mixture into tube. Empty contents of tube, four drops, onto four separate slides, place slides in air bath to dry, cool and apply stain.

Graff Method. From each of the four test tubes prepare two slides using a standard dropper with 4 mm. inside diameter. Place one drop of suspension at each end of each slide. Dry in draft of warm (not hot) air. Apply drop of stain and remove surplus by tilting. Put slide on dissecting microscope and place all fibers, from each drop, lengthwise, side by side, in middle of slide. Cover with cover glass. Usually it is necessary to add another drop of stain.

Preparation of Herzberg Stain

(See M. F. Merritt, PAPER TRADE J. Aug. 24, 1922).

Solution A. 50 g. dry zinc chloride in 25 cc. distilled water. Specific gravity at 28° C. should be 1.8. Pour into tall cylinder.

Solution B. With part of 12.5 cc. distilled water rinse thermometer, hydrometer and original zinc chloride container. Dissolve 5.25 g. potassium iodide and 25 g. iodine in balance of 12.5 cc. water.

Add *A* to *B*. Stir well and place in dark. The following day pipette off the clear solution and put into black bottle. Add a leaf of crystal iodine.

To make smaller amount of solution use the following quantities using same procedure.

20 g. zinc chloride in 10 cc. water.
2.1 g potassium iodide } in 5 cc. water.
.1 g. iodine }

Lofton-Merritt Stain for Sulphate Pulp

A. 2 grams malachite green in 100 cc. distilled water.

B. 1 gram basic fuchsine in 100 cc. distilled water.

Keep in tightly stoppered bottles and mix in equal quantities when wanted for use.

After fibers are placed on slide dry with hard filter paper. Add two or three drops of the compound stain and let stand for two minutes, during which time the fibers are being gently mixed with needles. Remove stain with filter papers, add 3 or 4 drops 0.1 per cent hydrochlorine and allow to remain on slide 10 to 30 seconds while mixing fibers. Take off hydrochlorine and with filter paper, add water and remove with filter paper. Add final drop of water and put on cover glass. Proper staining and washing can be determined by tests on samples of pure unbleached sulphite and pure sulphate pulps.

(See Technical Association Papers, Series III, Dec., 1920, pages 1-7).

Bright Stain for Bleached and Unbleached Pulps

(See Paper Testing Methods (1922), page 13).

Simple Method to Distinguish Unbleached and Bleached Sulphite

After fibers are placed on slide dry with hard filter paper. Add one drop or more of 1 per cent malachite green in water. Let dye remain not less than one minute, meanwhile mixing fibers gently with needles. Draw off dye with hard filter paper, add water, mix fibers and draw off water. Add one drop 0.1 per cent Congo red in water and treat as in foregoing. Add final drop of water, distribute fibers on slide, put on cover glass and examine with microscope.

Bleached sulphite pulp is colored entirely red.

Unbleached sulphite pulp is colored all green, red and green or red with bordered pits green.

a. News print grade sulphite shows a larger proportion of all green fibers.

b. Easy bleaching grade sulphite shows very few all green fibers but in practically all fibers, some or all of the bordered pits are green.

Sulphate pulp is stained all green. To determine if sulphate is present use the Lofton-Merritt stain.

Microscope and Magnification

Any standard microscope fitted with a two-thirds inch (16 mm.) objective and a one inch 10 eyepiece, giving a magnification of about 100 diameters may be used. A substage condenser with iris diaphragm, and a mechanical stage increase ease and accuracy of work. For methods involving measurements a stage micrometer and an eyepiece micrometer are necessary.

Spence Method. Use magnification of about 160 diameter.

Graff Method. For placing fibers use any standard dissecting microscope.

Application of Stain. Put one or more drops of stain on fiber. Remove excess stain by tilting the slide.

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Methods of Analysis

Quick Method. Estimate the proportions of the different kinds of fiber present by looking over the slide. Use at least three slides and take average results. Compare with standard mixture.

Gravatt Method. Estimate from several slides. Compare with standard mixtures stained at same time.

Spence Method. Use a microscope giving magnification of about 160 diameters, fitted with a mechanical stage. Taking the diameter of the field as a measure note the total lengths of the various fibers present in several fields. Apply factors given below and calculate percentages.

Fiber Weight Factors

Rag	1.000
Coniferous sulphite	.870
Hardwood soda	.500
Poplar	.450
Birch	.662
Beech	.525
Maple	.365

It is suggested that the other factors must be determined such as ground wood, straw and esparto, etc. They have not been included in this, but these figures may be obtained, as I said, in paper testing methods.

Graff Method. Using a mechanical stage and filar micrometer, determine the total length of each kind of fiber present on each of the eight slides. Apply fiber weight factor as given by Spence.

Count Method. Any count method which does not include measurement of lengths and allowance for variations in weight of the different kinds of fiber cannot be accurate. Since specific methods which involve counting and measuring the fibers are available no general count method will be considered.

Accuracy and Practicability. The *Quick Estimation method* is one which allows most rapid work. In mixtures of only two kinds of fiber, it is accurate to about 5 per cent.

Graff claims an accuracy of within 1 per cent for his method.

No degree of accuracy is established for any of the methods.

Discussion. Any errors which may occur in careful preparation of sample are very minor in comparison with errors which occur in the actual determination.

The *Quick Estimation method* is of sufficient accuracy for much work that needs to be done. The absence of use of caustic alkali reduces time of washing and the fact that the pieces of paper are used whole saves the time involved in disintegrating by shaking as used in other methods. The time required to separate with needles the very small amount of fiber placed on the slide is short.

It should be easy to establish a standard between the *Spence* and the *Graff method* if such a type of manipulation is considered best.

The *Gravatt method* has the appearance of being built on the most logical foundation for accurate work.

The combination of the *Gravatt method* of weighing out the original sample, and this or the *Spence* or *Graff method* of transferring to slide, with the measuring of fibers and application of tfactors as in the *Spence method* should give the best possible results.

It is my understanding that samples of known and unknown composition are to be sent to the various laboratories for study, and it is our plea that each of the methods described be given a fair trial to determine which method shall be adopted for mill control work and which method for accurate fiber analysis.

CHAIRMAN CURTIS: Mr. Lee and Mr. Peckham did not feel that they were justified in arbitrarily making definite recommendations at this meeting. We hope that the reading of these suggestions will induce some discussion which would show the tendency of the meeting towards one or two of the methods. On the basis of the discussion at this meeting the committee will make certain recommendations to go out with these standard mixtures to the laboratories, and those of you who will co-operate will be asked to try these methods fairly, follow them strictly and give your complete criticisms.

I want to repeat, as has been said two or three times, that we want a mill control method, which is accurate enough for work in the mill, for studying your mill conditions or a rapid method for rough test. That is one method. The other method needed is an accurate method for research work and wherever there is a case of dispute.

J. N. STEPHENSON: If the committee can develop a description of directions for manipulation of the fiber analysis and follow it up with an interpretation of the results in the beater furnish, it will be extremely useful to the industry.

A point that occurs to me is that of colored and tinted papers. There is hardly a paper on the market that hasn't some color material in it, and I would inquire as to the effect of the use of certain dyestuffs on the results obtained under the microscope when you use standard stains.

H. L. PECKHAM: In using ethanol, most dyes are soluble, and therefore the dye is dissolved by boiling in ethanol.

H. V. KIELY: On black papers and very dark wrapping papers such as jute there is difficulty. On a black paper I don't think we have even been quite sure where there is a mixture of sulphite and rag, and rope stock, with bonds and ledgers there is never any trouble. The caustic takes out the color.

G. K. SPENCE: I have never experienced any trouble in this regard on high grade papers; I haven't paid much attention to the lower grades.

As to adopting a quick method for use in different mills, I don't see how that is possible for the Paper Testing Committee to adopt any method that is a quick method of estimation that can be used in the different mills. That is all a mill problem. I could give you my experience along that line. When we first started standardizing fibers, I thought it was our problem to find what we were doing in the mill. My first step was to standardize soda pulp as against sulphite pulp when examined under a microscope, and I made a mixture of soda pulp and sulphite pulp, and arrived at a factor which was 1.8 at that time. We used that factor for four or five years. I gave Mr. Wells the factor that we were using at that time in distinguishing sulphite from soda. Then we found we were up against different hard woods and the factor wouldn't hold in all cases, but it is not far off at the present time.

As for the Paper Testing Committee standardizing the quick method for all mills, I think it is out of the question unless the *count method* is used with the weight factors. The count method with the weight factors may seem long, drawn-out requiring a lot of time, but I use it entirely in my laboratory work. The time can be reduced as much as desired but with a proportionate decrease in accuracy.

Another question I wanted to bring up was that of other laboratories working on fiber analysis, checking up our standards. I think it was all of five years ago that the count method was published, giving the weight factors for the different fibers and I have never heard of any one checking them up. The work was done in my laboratory and checked very closely at the time, but I think it should be verified by other analyses and also that other fibers should be standardized.

We have been rushed with other work and for some time haven't done very much work on fiber analysis that is, standardizing the fibers, but at the present time we are back on the job and the question of getting factors for esparto and hardwood may come up, and I would like to see others do something on that line.

J. N. STEPHENSON: Mr. Spence has brought up just the point that I would like to get settled. I am assuming that we should have in the textbooks the details of the manipulation of certain methods that are known to be satisfactory. Mr. Spence assures us that his method gives him satisfactory results in his mill when he wants to match a certain sample of paper.

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It seems to me that with the class of students we have to provide for, it is not necessary to give so much of the theory of a lot of high grade methods, but to take certain methods and tell just exactly every step that the man has to follow to get the results if the thing is properly done, and then to show him how to apply the results in checking the beater furnish.

CHAIRMAN CURTIS: As a Technical Association we should have a method for mill control work that is based on the best practice, so that a laboratory apprentice has something to start with, or when he is studying the textbooks he has something to aim at for mill control work.

Mr. Spence has had long experience and I will wager if he, when he came out of school, had a quick method which was recognized by the paper industry, it would have saved him a whole lot of work. It is not the idea to make every one adopt the standard quick method in mill control work, but I do believe it is desirable for the Association to have some such method.

Let me bring up a case in point. Several weeks ago a committee of the A. S. T. M. got up a set of specifications for methods for testing paper for insulating purposes and came to me for criticism. I am going to bring up this subject later, but I want to bring out the point. They had worked up for themselves a method which bore practically no resemblance to any method used by paper laboratories.

Now, if this Association had a method that we could offer A. S. T. M. for insulating papers, they would be saved all that investigation. It doesn't mean every one in this room doing microscopic work need adopt it for themselves, but the new men coming on will have something to start with.

J. J. O'CONNOR: I have used the *quick estimation method on* soda and sulphite papers and I find that I get a result well within the limits of accuracy of the furnishing in the mill. If any one will tell me that he can furnish a beater and be sure that it is within five per cent, then I will agree that we probably need a much more accurate method than estimation for mill control.

L. M. YOERG: I feel about it the way Mr. O'Connor expressed himself; that if we could control the furnishing of the beaters to such a fine point as you tried to cover by the different accurate methods, perhaps it would be worth while adopting them, but I don't believe it can be done; at least we haven't been able to do it.

H. U. KIELY: I am sure we never would be able to use the very careful methods for mill control. We have to make perhaps 30 or 40 tests a day and if we allow ten minutes for a fiber analysis we think we are spending a lot of time. We have no trouble at all in checking within five per cent and we check up almost every day on one of our beaters and our estimation method is accurate within five per cent.

J. N. STEPHENSON: May I ask Miss Kiely if the microscopic estimate includes an examination for the filler as well?

H. U. KIELY: No, we determine our ash quantitatively and the kind of filler qualitatively.

We have never tried using the microscope to determine filler, for the reason that while one chemist is making the fiber analysis with the microscope, another chemist is determining the filler in the ash quantitatively, but I would be very glad to try it. We would like some expression as to whether we have gone ahead the right way.

J. N. STEPHENSON: It seems to me that it is up to the committee to undertake the trying out of the suggested methods and by comparison of results arrive at a conclusion as to which is more satisfactory.

J. J. O'CONNOR: I think you are going about that problem in the right way, and as you state it is necessary to have two methods; one a very accurate method which you can use in laboratory work, and another, a mill control method which I think you can settle and determine by sending samples around to the different laboratories and having them submit their analysis of the same.

I think that is the logical way to follow in settling that proposition, and I do not think it is worth while to try to get your figures within an accuracy of five per cent on account of the difficulty there is in trying to furnish a beater within that accuracy.

J. N. STEPHENSON: I would like to know whether in the textbook the meeting approves of giving in full one method which is known to give satisfactory results, so that anyone can follow every step in it, and then follow that up with an example of how some particular analysis is used in the mill.

J. J. O'CONNOR: Mr. Chairman, I would like to answer Mr. Stephenson on that question, too. I think if you submit samples to the different laboratories and results obtained showed that the estimation method checked within a specified limit, that would be the method to put into the textbook because the textbooks are going to be used for the benefit of men operating in the mill and from a manufacturing point of view.

I would say the method to put into the book would be the quick or control method of the results warranted.

(To Be Continued)

Pulpwood Consumption and Wood Pulp Production

WASHINGTON, D. C., November 20, 1922.—Preliminary statistics just released by the Department of Commerce, compiled by the Bureau of the Census, acting in co-operation with the Forest Service, U. S. Department of Agriculture, show that during 1921 the consumption of pulpwood was 4,557,179 cords, and the production of wood pulp was 2,875,601 tons. This is a decrease of 25.5 per cent in the consumption of pulpwood and 24.8 per cent in the production of wood pulp compared with the preceding year, when the demand for pulp was still abnormal owing to the world shortage following the war. The decreased activity in this industry during 1921 appears to have been general throughout the country with the exception of Oregon and California, the consusmption of wood in the manufacture of pulp in those states having increased during the past several years.

In 1921 reports were received from 252 active establishments as compared with 253 in 1920 and 258 in 1919. The largest number of plants, 81, was reported from New York. This state, however, ranked third in the consumption of pulpwood, being superseded in 1921 by Wisconsin for the first time. Maine is the most important state in this industry, reporting 22 per cent of the total quantity of pulpwood consumed in the United States.

The figures for 1921 are preliminary and subject to such changes as may be necessary from further examination of the reports.

Comparative statement follows:

PULPWOOD CONSUMPTION AND WOOD PULP PRODUCTION, BY STATES, 1919, 1920[1] AND 1921

State	Pulpwood Consumption (cords)			Wood Pulp Production (tons, 2,000 lbs.)		
	1921	1920	1919	1921	1920	1919
United States	4,557,179	6,114,072	5,477,832	2,875,601	3,821,704	3,517,952
Maine	1,005,158	1,389,495	1,279,852	710,329	942,730	916,764
Michigan	186,532	243,632	207,234	103,532	132,776	106,194
Minnesota	164,547	254,193	203,862	117,934	170,216	129,560
New Hampshire	258,206	403,530	375,597	152,797	239,634	232,134
New York	781,168	1,130,505	1,055,145	606,869	830,045	811,958
Oregon and California	192,869	190,399	171,765	124,494	148,877	123,990
Pennsylvania	326,486	490,784	423,822	167,310	238,013	215,686
Wisconsin	867,195	964,781	854,185	488,501	548,528	506,549
All other States	775,018	1,046,753	906,370	403,835	570,885	475,117

[1] Compiled by the Forest Service.

Southworth Company Supports Textbooks

The Committee on Vocational Education has just received a substantial check from the Southworth Company, Mittineague, Mass., as its contribution towards the completion of "The Manufacture of Pulp and Paper."

A few days ago a telegraphic order for ten copies of Vol. I. was received from Kalamazoo Vegetable Parchment Company, Kalamazoo, Mich., in addition to original order for twenty-five copies.

POWER PLANT COST ACCOUNTING ADAPTABLE TO DIFFERENT CLASSES OF PAPER AND PULP MILLS

[The desirability of having the power plant regarded as a distinct department of the paper or pulp mill has been urged for a long time by the best plant engineers. Some of the best mills carry the steam and power plant as a production department, producing steam and power to be distributed to the pulp and paper mill for process work or for heating. It is recognized that it is only by having the costs in a form possible to analyze them that improved efficiency can be attained.

The following article is an outline of steam and power plant cost accounting based on forms prepared by V. D. Simons, consulting engineer of Chicago, in collaboration with the engineers of Republic Flow Meters Company, also of Chicago.

The records covering the quantity of steam produced and distributed are necessarily obtained from the integrations of properly placed steam flow meters. The amount of fuel used to be accurately known requires, in the case of coal, some type of scales. In the case of wood room refuse the problem is more difficult. It is probable that the best system would be a weightometer in the conveyor carrying the wood room refuse to the boiler house, together with systematic moisture testing of the material. It is well known that in the case of wood room refuse the fuel value varies almost directly with the moisture content, as has been shown in various reports made by the Waste Committee in regard to barking drum refuse utilization.

It has been authoritatively stated that apart from the raw materials the chief items of cost in the manufacture of pulp or paper are labor, steam and power. As in many mills the source of both steam and power is wood room refuse, coal or fuel oil, it is clear that the efficiency of the steam plant has a strong bearing on the ultimate cost of the finished product.—EDITOR'S NOTE.]

The subject of power plant cost accounting is of vital interest to two distinct branches of every industry which generates steam for power or processes.

One branch comprises executives and accountants who have had extensive training in the general methods of cost accounting, but who are interested in power plant practice only indirectly and purely from a profit and loss standpoint.

The other branch embraces engineers and operating men who are familiar with power plant operation, but who have given little attention to the systematic recording of costs.

To those familiar with cost accounting methods, the forms and methods outlined in the following pages, although necessarily general, will at once suggest the simple changes which will make them adaptable to individual requirements. As to the records of steam production, which are obtained by means of steam flow meters, the accountant or executive should confer with the power plant engineer, whose experience should enable him to explain the methods of metering steam and supplying necessary records to the accounting department.

On the other hand, the power plant man should refer that portion of the system that involves general cost records to the accounting department, so that the most practical methods of arriving at costs may be adopted.

In other words, power plant cost accounting, to be highly successful, calls for a close cooperation of the manufacturing division and the steam production division as well as a combination of the specialized knowledge of the men behind these departments.

In this respect power plant cost accounting paves the way to new opportunities for lowering manufacturing costs, because it supplies a much needed link between two divisions that formerly have been too self-centered. A study of the methods briefly covered will show engineer and accountant alike that their interests and the possibilities of their departments are closely interwoven and fundamentally identical.

The power plant engineer will realize that, since he is actually operating a "steam factory," factory cost keeping is unescapable. The factory head or accountant will realize that steam costs must be as carefully checked as the many other items which, although of less importance, have for some inexplicable reason, commanded a far greater share of the accountant's attention.

By adopting the simple accounting system described, the cost of power production will become a known quantity instead of an estimate based on hypothetical test runs, the amount of steam used by each department will become a known quantity instead of a guess, and thus the one vague element of production costs—steam and power cost—will become a matter of continuous record.

The Cost of Steam Generation

The first step in power plant cost accounting is to determine the cost per thousand pounds of steam generated. To accomplish this certain quantities must be definitely obtained—*i. e.*, the amount of coal burned, water used, and the total actual amount of steam generated.

The above cost, Form No. 1, is therefore divided into two classifications, viz.: "operating expenses," and "maintenance and depreciation."

Under "operating expenses" the first item is "fuel." Since fuel is purchased by weight, the amount used during any given period can be definitely determined.

Form No. 1 COST OF GENERATING STEAM

	Month of.....			Accumulative.....months		
	Labor	Material	Total	Labor	Material	Total
Operating Expenses—Generation:						
1. Fuel used by steam plant (coal, oil, refuse).....M lbs.	.....	.....	.....	.....	.....	.....
2. Water used by steam plant.....Cu. ft.	.....	.....	.....	.....	.....	.....
3. Pay of superintendence.....	.....	.....	.....	.....	.....	.....
4. Miscellaneous labor.....	.....	.....	.....	.....	.....	.....
5. Oil, grease and waste.....	.....	.....	.....	.....	.....	.....
6. Supplies	.....	.....	.....	.....	.....	.....
7. Electricity used by steam plant.....K. W. H.	.....	.....	.....	.....	.....	.....
8. Steam used by steam plant.....Lbs.	.....	.....	.....	.....	.....	.....
Total operating expenses.....(a)	.....	.....	.....	.....	.....	.....
Maintenance and Depreciation—Generation:						
9. Depreciation on power plant building and equipment used in producing steam	.....	.....	.....	.....	.....	.....
10. Repairs to power plant buildings.....	.....	.....	.....	.....	.....	.....
11. Miscellaneous equipment.....	.....	.....	.....	.....	.....	.....
12. Repairs to boilers and fittings.....	.....	.....	.....	.....	.....	.....
13. Repairs to power plant piping.....	.....	.....	.....	.....	.....	.....
14. Repairs to coal and ash handling apparatus.....	.....	.....	.....	.....	.....	.....
15. Repairs to miscellaneous equipment.....	.....	.....	.....	.....	.....	.....
16. Loose and hand tools.....	.....	.....	.....	.....	.....	.....
Total maintenance and depreciation.....(b)	.....	.....	.....	.....	.....	.....
17. Total cost of generating steam (a-b).....	.....	.....	(c).....	.....	.....	.....
18. Pounds of steam generated (total of Flow Meters).....	.....	.....	.....	.....	.....	.....
Unit and total cost.....	.....	.....	.....	.....	.....	.....
19. Pounds of water evaporated per pound of coal (18-1).....	.....	.....	.....	.....	.....	.....

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Form No. 2

DISTRIBUTION OF STEAM

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Av. Yr.
1. 1,000 lbs. steam used in Dept. A													
2. 1,000 lbs. steam used in Dept. B													
3. 1,000 lbs steam used in Dept. C													
4. 1,000 lbs. steam used in Dept. D													
5. 1,000 lbs. steam used Turbines													
6. 1,000 lbs. steam used Generating Engines													
7. 1,000 lbs steam used Heating Systems													
8. 1,000 lbs. steam used Miscl													
9. 1,000 lbs. steam not recorded													
10. Total 1,000 lbs. Steam Generated													
STATISTICAL													
11. Production tons Dept. A													
12. Lbs. of steam per ton													
13. Steam cost per ton													
14. Production tons Dept. B													
15. Lbs. of steam per ton													
16. Steam cost per ton													
17. Production tons Dept. C													
18. Lbs. of steam per ton													
19. Steam cost per ton													
20. Production tons Dept. D													
21. Lbs. of steam per ton													
22. Steam cost per ton													
23. K.W. Generated													
24. Lbs. of steam per K.W. Hour													

The second item "water," must be metered so that the quantity of water can be ascertained for a given time.

Items 3, 4, 5 and 6 are simple bookkeeping values, and item 7 can be readily determined by a watthour meter on the electric power line feeding into the boiler plant.

Item 8 is supplied by a steam flow meter, located so that all steam used within the boiler plant by auxiliaries and miscellaneous equipment will be measured.

The total operating expenses sum up under the total (a).

Under "maintenance and depreciation," items 9 to 16 inclusive are all strictly accounting entries and need no extensive explanation. The total "maintenance and depreciation" sum up under the total of (b).

Item 17, which is the sum of (a) and (b), represents the total cost of steam generation.

The steam generated by each boiler must necessarily be metered as this is the only method whereby the total amount of steam produced can be obtained. The sum of the boiler meters determines the thousands of pounds to be set down opposite item 18, and provides the necessary figures to compute the unit or basic cost of producing one thousand pounds of steam.

Item 19 compares the efficiency of the boiler plant during one month with the efficiency during another and should be watched carefully from month to month.

Distribution of Steam

The careful and economical distribution and use of steam is just as important as the generation of the steam itself. In fact, many companies that have cut their cost of producing steam to the minimum are, by wasteful distribution, losing a large part of the saving thus effected. Another equally important reason for keeping a record of steam distribution is found in the economic necessity for accurately apportioning the steam charges to various departments.

Unless this is done it is obviously necessary to guess at the amount of steam used, which naturally results in one department being unjustly penalized while another derives an unfair benefit.

Metering the steam and correlating the results is the solution to this problem. The form (No. 2) suggests a method which replaces estimates with definite figures. It has been prepared to show the broader application of the principles of steam distribution rather than any specific case. In studying the form, assume an average

FLOW METER READINGS

Form No. 3

	Steam Generated						Steam Distributed							
Month	Boiler Feed Water	Boiler No. 1	Boiler No. 2	Boiler No. 3	Boiler No. 4	Boiler House Aux.	Dept. A	Dept. B	Dept. C	Dept. D	Turbo Generators	Generating Engines	Heating System	
1														
2														
3														
3														
4														
5														
6														
7														
8														
9														
10														
11														
12														
14														
15														
16														
17														
18														
19														
20														
21														
22														
23														
24														
25														
26														
27														
28														
29														
30														
31														
Difference from 1st of month														
*Total M lbs. steam														
Total M steam gen														
Total of Boiler Meters														

*Multiply difference by meter constant.

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manufacturing plant generating its own power and having four major divisions or departments.

From the system outlined by Form No. 1, the fundamental or basic figure will have been obtained, namely, the cost of generating one thousand pounds of steam.

In Form No. 2, items 1 to 4, inclusive, represent the steam used by departments in the various manufacturing processes. Meters are installed on the main steam supply lines to the departments, the readings from which give the amount of steam consumed in thousands of pounds.

Items 5 and 6 show the amount of steam used for power generation. The meters are installed on the mains delivering steam to the power house.

Item 7 segregates the cost of heating which represents a considerable amount in some localities.

Item 9 represents the smaller and less important steam lines where metering would be impossible and of no real advantage as far as cost accounting is considered. It is the difference between the sum of the metered steam and the total steam generated found on item 18.

Item 10 is the total steam given on Form No. 1, item 18.

Items 11 to 22, inclusive, are statistical and a great aid in comparing production costs from month to month. Any increase in steam consumption will be immediately discovered.

Items 23 and 24 show the cost of electric power generation.

The flow meter readings are, in most cases, taken by the operating department. The meters are read daily and the daily records turned over to the accounting department at the end of the month. The daily reading is recommended rather than the weekly or monthly reading, as very often controversies arise as to the use of steam which can easily be settled when the meters are read daily.

One of the forms (No. 3) used by departments must necessarily conform with charts 1 and 2—*i. e.*, it will have a column for each boiler and for each main line of distribution.

When this form reaches the accounting department at the end of the month, it will contain all the information necessary for completing Charts No. 1 and No. 2.

Power plant cost accounting will prove profitable in small as well as large plants. Considering the economies obtained thereby, the cost of the system is surprisingly moderate.

CELLOPHANE: ITS PROPERTIES AND METHODS OF TESTING*

By Willy Gruenwald

Cellophane, which in Germany is called "Cellulose-Glass Film," is a product similar to artificial silk, with this difference that it is precipitated not in the form of a thread as in artificial silk, but in the form of a sheet as in paper. The raw material from which the product is made, is cellulose, which is dissolved in a chemical and then reprecipitated. The original French process was invented by Nachahmer and far as is known, nothing has been published regarding it. The details are guarded very carefully as manufacturing secrets. A plant has been erected in Germany for manufacturing cellophane, which today is made solely by the Societe La Cellophane in Bezons, France. The new German plant is located at Altona-Bahrenfeld.

Description of Properties of Cellophane

The various tests that were made with cellophane, which are described in this article, were carried out with the product manufactured by the French company. Cellophane resembles an extremely thin sheet of glass only in its simplest and most original form. At the present time cellophane is made in sheets that weigh from 25 grams to 200 grams per square meter. The sheets are from 0.02 millimeter to 0.12 millimeter thick, and as clear as glass. The product can be improved through stamping and coloring. Embossed cellophane with a silk, taffeta, linen, silk-moire or shagreen finish on the surface is not only much like the fabrics themselves in appearance, but the feel of the material is so soft, that it appears as if really thick fabrics are being examined.

Uses for the Product

Cellophane is furnished to the trade in the form of rolls and sheets. Inasmuch as it can be firmly cemented and joined together and easily printed, fine bags or cylinders can be made from it for covering such merchandise as confectionery, where it is necessary to see the product through the external covering of the package. The fact that cellophane is impervious to water and air, which may affect the flavor, makes it of particular value in the packing of various kinds of food, biscuits, perfumes and cosmetic preparations, pharmaceutical and other similar products. Sheets of all sorts can be produced with it by the aid of colored and embossed designs which are worked into the cellophane by suitable means. The simplest form in the uncolored state is used in making window envelopes.

Several tests were made with cellophane, particularly to determine the strength and to arrive at some idea of the comparative qualities of the product. The extent of the tests was limited by the small number of samples that were available. In all the samples that were tested, the ash content varied between 0.52 and 0.79 per cent. Cellophane burns quietly just like paper, when ignited. The thickness of the product does not increase in exactly the same proportion as the weight per square centimeter. In the higher weights it is comparatively thin. When the cellophane is wetted with water or printers' ink in spots, then the sheet crumples up strongly in places. In spite of the fact that it will prevent the passage of water through its structure, cellophane absorbs water and printers' ink comparatively rapidly. When treated in this manner the cellophane becomes sticky and capable of being printed on, properties, which, however, are somewhat influenced by the simultaneous crumpling of the paper that takes place at the same time. When the sheet is handled very carefully, however, the shriveling or contraction in the paper does not remain permanently.

Cellophane is not soluble in water. Even when it is boiled in water for several hours, it is not dissolved. From strength tests of the simplest kind it may be concluded likewise that the strength varies strongly according to any direction in which a line may be drawn on the sample. Furthermore, it is difficult to tear the cellophane. Once however it is torn, it is very easy to continue tearing it in the same cut. The strength of the cellophane varies according to whether it is torn lengthwise or cross-wise. (A description of strength tests made with different grades of cellophane is given in the original article. It is concluded from these tests that the strength of the product is ample in meeting the demands made on it in the various applications to which it is put.)

* Zellstoff und Papier, 1922, 186-7. Translated by Ismar Sinsberg B. Sc., Chem. Eng.

Beaters and Beating

The British Technical Section has arranged for the translation and publication of Dr. Sigurd Smith's treatise on this subject. It is expected to be ready for distribution in January.

It was decided also to undertake research in beating under the charge of a man employed specially for the purpose.

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HEAT ECONOMY IN MACHINE ROOM VENTILATION*

By J. O. Ross, Pres. and Gen. Mgr., J. O. Ross Engineering Corp., New York

The question as to the proper method of ventilating a machine room should only be decided after a full realization of what it means in the way of cost, not only first cost, but operating cost. In this paper I will try to show not only the different methods of ventilation, but to show what the problem is and especially to bring out some of the knowledge which has been accumulated in the last few years on a subject which has, up till now, been treated mostly by rule of thumb and in accordance with the judgment of the individual designer. In general, I would say that the machine room presents not so much a heating problem as a ventilating problem. The amount of heat given up by the driers is almost enough to keep a room comfortable in temperature except possibly at the extreme ends of the room. There is, however, a large amount of vapor arising from the machines. This amounts roughly to about 2 lbs. of water evaporated per pound of paper. In other words, a machine turning out 50 tons of paper per day is evaporating approximately 100 tons of water per day, which must be taken care of unless we are to have serious trouble with fog and condensation.

Oldest System of Ventilating

Probably the oldest system for ventilating a machine room consisted of allowing the vapor laden air to escape through the roof either by natural draft or by the use of fans and allowing air to leak into the room to take its place. If this air came into the machine room from some other department of the mill, conditions were not so bad, but if it had to come in from outdoors around windows and doors, the cold air would cause condensation and drip. The next step was to put steam coils on the roof to keep the roof warm and prevent this drip.

Then came the system of forced ventilation whereby a quantity of air practically equal to the air being removed from the roof was preheated and admitted to the machine room. This was a big step in advance and until very recently seemed to answer the requirements. The air was usually blown onto the roof as it was found that most of the condensation occurred on the roof and by keeping the roof warm this condensation was prevented. The method of application of the air and the quantity of air varied, depending upon the opinion or judgment of the engineer and mill owner, principally perhaps, depending on how much money it was desired to put into a system or upon how much power could be given up to the system or on whether exhaust steam was available for heating the air and the ducts were run wherever it seemed that there was the best space available. The amount of air was usually based on changing the air in the machine room in so many minutes, therefore it became common to specify a five minute air change or if that seemed to be too big a system for commercial reasons, a ten minute air change might do, or even a fifteen minute air change, in which case the air was heated more to make up for the smaller quantity.

We don't need to point out that this method of figuring a system was all wrong. Practical experience would cause a man to decide on a five minute air change because in some other mill a five minute air change had been used and seemed to work all right, yet the new mill might have a machine turning out twice as much paper in the same size room. The height of the room had something to do with this. If a room was twice as high it would presumably need twice as much air, while, as a matter of fact, in a general way, the higher the room the less air is needed. The amount of water to be evaporated very seldom is considered, yet in some mills the paper enters the driers 30 per cent dry and in other mills 40 per cent dry. In other words, in the second mill there would be about 16 per cent less water to take care of.

Factor of Building Construction

The construction of the building has a great deal to do with the problem. The amount of glass surface; whether it has a cold roof or a warm roof; whether the machine was hooded or not hooded. Very few of these things received any consideration except that a man with considerable experience would allow an arbitrary amount for the various features. If, for instance, he saw a concrete roof, he would allow perhaps 10 or 15 per cent more air, or if he saw a big machine, he would allow a little more air. The only test of a system was whether it kept the roof dry. If it kept the roof dry it was a good system. If the roof was not dry it showed the system was not big enough and therefore the thing to do was to put in more air. The fact that he might have too much air now and simply had not applied it properly had nothing to do with the situation.

Under the new modern method it is recognized that air will carry a certain amount of vapor in suspension in passing out of the roof. The more moisture that is carried out per cubic foot of air, the less air is required to be removed. It should be borne in mind clearly that all of the air which is removed from a machine must be replaced and that it must be heated somewhere from the outdoor temperature to the temperature at which it goes through the ventilators. It doesn't matter whether this air is heated in an adjoining room, or in a separate heater, or from the machine driers, or by steam coils, it should be borne in mind that it is heated somewhere and that you are paying for heating it. Many people have an idea that the air passing out of the machine room is saturated. As a matter of fact this point is very rarely reached, and indeed it is dangerous to reach such a point because the slightest cooling down of the vapor laden air will cause condensation.

Air Under Different Conditions

I am going to show three charts that were taken in the vent stacks from a certain paper machine by the use of recording wet and dry bulb thermometers. The largest circle on the chart shows the temperature of the dry bulb; the inside circle the wet bulb. These are three charts taken during the winter of 1921 and show not only that the air was not saturated, but that it varies under different conditions.

The first chart was taken September 9. This was a machine that was hooded, with a system of warm air being supplied to the machine room. It will be noted that the temperature of the dry bulb is approximately 110° and the wet bulb approximately 106°. This is approximately 87 per cent saturated and the air would carry 26 grains of moisture in each cubic foot of air. On January 4, 1922, on the same machine, it will be noted that the dry bulb temperature was approximately 118° and the wet bulb temperature approximately 98°. This was 49 per cent and each cubic foot of air was carrying approximately 17 grains of moisture. On January 26, the same machine showed a dry bulb temperature of 108° and a wet bulb temperature of about 88°. This was 45 per cent saturated and each cubic foot of air carried about 12 grains of moisture. In other words, on December 9, each cubic foot of air was carrying out of the mill over twice as much moisture as it did on January 26, therefore to carry off the vapor from the same tonnage of paper, twice as much air was being used on January 26 as on December 9. This was due to the fact that this is a specialty mill and in December was running a very heavy paper. In January they were running a very light paper with about half the tonnage, yet their exhaust fans and ventilating equipment was furnishing

*Delivered at the meeting of the Miami Valley Division of the American Pulp and Paper Mill Superintendents' Association, Middletown, Ohio, Nov. 25, 1922.

just as much air in one case as in the other. At no time did this roof drip and in the old days both runs would have been considered satisfactory. In view of what we know now, if the mill was going to run for any length of time on the paper being made January 26, one-half the air should be used and the ventilating system should have been adjusted to meet it.

Would Have Effected Big Saving

In this particular mill this would have meant a saving of 3,000 pounds of steam per hour, worth at least $1.50 per hour, or $36 per day, and even considering only 100 days in the year, would mean a saving of $3,600 per year, in that little machine room. This gives an idea of the importance of this problem. In the old days when a mill owner was purchasing a ventilating equipment, he would ask how much steam it would take and when the engineer would figure the amount of heat required to heat this quantity of air, they would often decide that they could not afford to give that amount of steam and would either abandon the idea or put in a smaller system. This was simply fooling themselves because they were going to use that steam anyhow and if they did not put it into the machine room, it was going to leak in and have to be heated anyhow. The cost of ventilating a machine room is part of the cost of doing business and should be faced with a clear understanding of what it is and with an equal determination that it shall be as economical as possible. I think if many mills realized that it is probably costing them 40 per cent as much steam to ventilate their room as to dry their paper, they would receive a shock—yet many mills are much worse than that.

One mill we investigated who were thoroughly pleased with their system because it kept the roof dry, did not feel so pleased when they discovered that the air was passing to the atmosphere one-third saturated and that they were using 1,100 boiler H. P. to ventilate that room, when they should have been using about 500 boiler H. P.

We will go on to a little general discussion of the various methods of introducing this air which, I think, we all agree, has to be admitted to the machine room and has to be heated.

Two General Systems

The two general systems for ventilating a machine room consist of hooding a machine and not hooding a machine. This question in itself is one that should be decided with a clear understanding of what it means. In the old days which, by the way, are not so very old, a ventilating engineer had a sort of hunch that he would be better off if he had a hood. The paper maker did not like a hood because it was a fire menace, collected dirt, made a machine room dark and in general he considered it a nuisance. Which man won his point determined on whether a hood was used or not. This question can be settled in a little different way. Remembering again that the amount of air removed from a machine room depends on the amount of moisture carried in each cubic foot of air, there is no question that you will carry more grains of moisture in a cubic foot of air if you hood the machine than if you do not hood it. We have collected statistics on about 100 mills as to the amount of moisture per cubic foot of air that we can expect under different conditions and as a general rule the air can carry from 20 to 25 per cent more moisture if there is a hood on the machine, which prevents the moisture scattering over the room and prevents the incoming air from short circuiting directly to the ventilator, therefore with a hood it is safe to put in from 20 to 25 per cent less air. The amount of steam that this will take and the cost of producing that steam can be definitely determined on each installation and then it is up to the mill owner to decide if that saving will compensate him for the cost of the hood and any undesirable features it may possess.

Just a word at this point in regard to hoods. There is no particular reason why hoods should be quite such a nuisance as they have been. Instead of the old wooden hood which was always out of repair, rotted out, collected a lot of dirt and was a fire menace, there are the new fireproof hoods such as those built of asbestos board and gypsum with steel framing so that they are fireproof, can easily be cleaned, and do not destroy the light to any such extent as the old hoods. This is a matter that should be decided with these points in mind. There is no question that from a ventilating standpoint a hood should be on every machine. From a manufacturing standpoint this can be determined only by the owner of the mill and his superintendent. Taking this general classification therefore of machines with hoods and machines without hoods, each of these practically divided into two more subdivisions—the first of these is the system that delivers all or most of the air towards the roof. The second is a system that brings all or most of the air in or around the paper machine driers.

Discharging Air Toward Roof

First—on the system that discharges the air towards the roof. If the machine is hooded it is not so important to get as uniform a distribution of the air on the roof, as if the machine is not hooded. Blowing the air along the roof tends to sweep the moisture towards the ventilators, keeps the roof warm and dislodges pockets of vapor which may gather between the beams on the roof. It will be remembered that the amount of air to be supplied is entirely dependent on the condition of the air leaving the roof and should have nothing to do except in an indirect way with the mill construction. The temperature of the air, however, is almost entirely dependent upon the mill construction. If the roof is a very cold roof it will be seen that the air must be much warmer in order to offset the heat losses and keep the air up to what it should be in temperature passing out of the ventilators. We cannot emphasize too strongly the importance of the roof construction. I feel that a concrete roof has no place on a machine room. It is a cold roof and the system of concrete beams produces the worst kind of pockets. A first class plank roof with tar and gravel works out very much better, while the new type of gypsum roof is perhaps the ideal roof, assuming that it is of the proper thickness and properly applied and maintained. The direction of the purlins and trusses has a great deal to do with the success of the ventilating system which blows along the roof of the paper machine room. In general, if the system of blowing air along the roof is followed, the air should be distributed so that all parts of the roof receive the proper amount. Care should be taken not to blow too much air or at too high a temperature on the roof or it will go to the atmosphere without properly carrying the right amount of moisture. In some cases it does not seem necessary to distribute the air very uniformly over the roof.

Outlets may be used at comparatively wide intervals and in some cases a combined fan and heater is used with one or more outlets discharging the air in comparatively large quantities over certain sections of the roof. This is the so-called unit heater. This has the advantage of doing away with a good deal of the piping but it must be borne in mind that in general the smaller the volume of air used the better, as long as it is sufficient to carry away the moisture from the machine. It is very possible to keep a roof dry by blowing along it with large outlets at very infrequent intervals, but this may mean discharging altogether too much air on some parts of the roof with a consequent waste of heat. Just how close the distribution should be placed is entirely dependent on local conditions and on the construction.

Simply Carries Off Moisture

Of late years, however, it has come to be recognized that the air discharged along the roof of the machine room doesn't perform any other duty than simply carrying off the moisture. A good many years ago the present vapor absorption system, so-called, was developed under the Belcher-Wilson patent. This was especially applicable to machines which operated without drier felts, such as board machines, pulp drying machines, etc. The air instead

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of being blown along the roof is introduced in the vapor pockets of the machine and absorbs the vapor as it is formed. In this way a volume of damp air rises from the machine instead of vapor as this vapor is absorbed right on the machine and sufficient air supplied to prevent it cooling down below the dew point on striking the cold roof. The condensation troubles are done away with. In addition it was found that it removed the vapor pockets which are otherwise present on all paper machines. Due to the design of a paper machine the vapor does not readily leave the pockets under the top driers, even when no drier felts are used and it will readily be understood that the paper doesn't dry out in passing through these pockets due to this vapor. By discharging warm air into the pockets the paper dries in passing from one drier to another and it prevents the vapor passing between the sheet and the drier and being re-absorbed into the sheet.

It is also possible to concentrate the air more towards the center of the sheet than the edges which tend to give a more evenly dried sheet. A great increase in the drying capacity of the driers is secured running all the way from 15 per cent to as high as 40 per cent.

All Advantages Without More Cost

As this system also supplies the warm air which passes out through the ventilators and the air is applied directly at the source of the vapor, it will be recognized that no more warm air need be supplied to the machine room by this system than by the system of blowing on the roof. Therefore, all the advantages of more drying and greater efficiency on the driers by removing the vapor pockets and the uniformity of drying, is secured without more cost for heat or air than if it was furnished through a roof system only.

I do not feel there is any question that where a machine can be supplied with a system of nozzles on the driers that is the proper way to ventilate a machine room. Even in this case, however, it is often necessary to blow air along the roof at the wet and dry ends on account of the cooler temperature at these ends.

In regard to machines which use drier felts top and bottom the vapor absorption system with cross nozzles is often applied, but it is usually impossible to get the air nozzles between the felt and the paper, therefore, these nozzles are usually kept outside the drier felt and simply remove the vapor from the pockets under the drier felt.

In other cases a proportion of the air is introduced into the pit of the machine and not only helps the circulation of the air around the machine, but performs the valuable service of keeping the bottom felt dry and prolonging its life. Its advantages are secured at no more cost than if all the air had been blown along the roof. I believe the time is just about here when every machine room will be ventilated by bringing as much of the air as possible directly to the machine by nozzles or by applying the air to some extent into the pit.

We will not discuss in this paper the methods of removing the air from the room, except to say that these fall into about three general classes. First is the so-called natural draft monitor. This is a part of the building construction and depends on the stack effect of the heat to move the air. If properly designed and specially arranged to prevent down drafts it is often a very satisfactory method. The second system consists of putting up metal ventilators and there are many types on the market, each one with claims of greater efficiency than the other. In general, about the only requirements that should be asked of the metal ventilator is that it will prevent the inward drafts of air. Many of the published tables of capacities of these ventilators are rather optimistic and caution should be used in applying them.

One of the serious drawbacks to any metal ventilator is the danger of rusting out.

The third method is to put in exhaust fans which, of course, is a definite, positive way of doing it, the only disadvantage, perhaps, being that it means operating machinery in a place where it receives very little attention.

Utilize a Part of Waste Heat

A subject which has been receiving a very considerable amount of study is the utilizing of the waste heat in the vapor passing out of the machine room. It has been well recognized for a great many years that an enormous waste of heat goes on continually. You all know how much steam it takes to turn the water in the sheet of paper into vapor. If this vapor is cooled down below the dew point it will begin to condense moisture and release this same heat of vaporization. In rough figures, for every pound of vapor that we condense back into water we get the heat equivalent of a pound of steam. This is the system on which the Briner Economizer is based.

By alternate systems of channels whereby the damp vapor passes through one channel and the air for ventilating the machine room is brought through the other channel, the vapor is cooled down to a point much below the dew point and the heat released is transmitted through the walls of the machine and heats the incoming air. A reference to the slide will show the approximate amount of heat carried out through the roof of the machine room. This shows air fully saturated and the heat is given in B. t. u. per 1,000 cu. ft. of air. For rough estimating purposes it takes about 1,000 cu. ft. of air per minute to carry away the vapor from a ton of paper per day. This is not quite accurate but you can get an approximate idea of the amount of heat if you multiply these figures by approximately the daily tonnage of your machine.

Assuming that air is passing out of the ventilator at 130° it will be seen that it contains 50,000 grains of moisture. If all the moisture could be condensed out of this air we would recover 7,370 B. t. u. per minute. If the air were cooled down to 70° and it was possible to do this without condensing any moisture from it, we would only recover 550 B. t. u. per minute. Now, if we could cool this vapor down to a temperature of only 100° it would contain then about 20,000 grains of moisture or we would have condensed nearly 30,000 grains. It would then contain heat of vaporization of 3,130 B. t. u. per minute, so that we would have recovered the difference between 7,370 and 3,130 which is 4,240 B. t. u. per minute recovered, which is from the condensation of the vapor. We would also recover in addition the difference between 550 B. t. u. sensible heat and 240 B. t. u. sensible heat, or we would have recovered 310 additional B. t. u. per minute. You will therefore see that we have recovered over 12 times as much heat from condensing the vapor as we did from cooling the air down. The total B. t. u. recovered would be approximately 4,550 per minute which is about 4½ lbs. of steam per minute or about 8 H. P. per hour, per ton of paper per day. Of course it is very seldom that we will strike a condition of 130° saturated, but this table will give an idea of the enormous amount of heat that we are wasting to the atmosphere. Several of these economizers are now in use and nine are being installed this winter.

Test in a Canadian Mill

On one test made in a Canadian mill, the outdoor air was entering the economizer as 20° above zero and was leaving the economizer at 88°. The condensation water is removed from the bottom of the economizer and is, of course, good distilled water at a temperature of about 75°. It is one of the biggest advances made in the utilization of waste heat which, up to this time, has been considered a necessary loss. The economizer is adaptable for any department where large quantities of damp air is allowed to escape to the atmosphere.

We are just at the beginning of the real work that is necessary to secure economical ventilation of machine rooms, but there have been some advances made in the past few years, as will be evident.

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CURRENT PAPER TRADE LITERATURE

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts of Literature of the Technical Association of the Pulp and Paper Industry

Doctor for Paper Machine Presses.—A. A. Judd. Can. patent 222,223, Aug. 15, 1922. A hopper is pivotally mounted close to the press and is provided with a scraper resting on the top of the roll. Means are provided for supplying running water to the hopper to carry the pulp which has been scraped off the roll into a suitable chute, whence it is pumped to the mixing room. The pressure of the doctor against the press roll is adjustable.—A. P.-C.

Bleaching, Bleach Manufacturing and Equipment

Advantages of Bleaching Pulp at a High Density.—R. B. Wolf. *Paper Mill*, xlv, No. 20, 4, 6, 7 (May 27, 1922); PAPER TRADE J., lxxiv, No. 22, 24, 26, 28, 30 (June 1, 1922). Under given conditions, with time of bleaching kept constant, the consumption of bleach and percentage of shrinkage vary directly with the temperature and inversely with the concentration of the solution. An apparatus is described in which the stock can be bleached at a concentration of 18 per cent, being delivered to the bleacher at 25 per cent and diluted to 18 per cent by the bleach liquor. The principle on which it is based is thoroughly mixing the stock and liquor at frequent intervals, which is accomplished by longitudinal worms which act as conveyors moving the stock in a solid mass and cross worms which force the stock and bleach liquor through openings 24 inches in diameter assuring very thorough mixing. At the plant of the Newton Falls Paper Co. the saving effected by this system is estimated at $3.99 a ton, and old hemlock which was too poor even for wrapper stock was used without culling and the resultant pulp produced a high-grade exceptionally cleaned bond paper.—A. P.-C.

Paper Manufacturing and Equipment

Process for Making Paper Pulp.—G. A. Mourlaque. Fr. patent 540,471, April 19, 1922. *Papier*, xxv, 356 (Aug., 1922). The wood or other vegetable material in a fine state of mechanical subdivision is subjected cold to the action of an oxidizing solution or gas for several hours; e. g., ozonized air under a pressure of 2 to 3 atmospheres, or a solution of barium or sodium peroxide treated with sulphuric acid in the presence of the fibrous material. This causes the incrustants to swell and soften up. The pulp is then broken and beaten hard, and can be used directly for the manufacture of news print or of wall paper. For the finer grades of paper, the pulp from the oxidation tank can be cooked in the usual manner.—A. P.-C.

Trimbey and Tibbitts Proportioning and Metering System for Paper Stock.—E. J. Trimbey. Can. Patent 223,973, Sept. 26, 1922. *Paper Ind.*, iv, 805, 807 (Sept., 1922); PAPER TRADE J., lxxv, No. 13, 60, 64 (Sept. 28, 1922). The meter consists of a cylindrical shell with a flanged inlet at the back for connection to the pipe line, and open for about 40 per cent of the circumference on the front side for dumping. Within the cylinder is a four-arm paddle wheel or rotor with heads at each end cast integral with the hub and arms, and with shaft carried in suitable bearings and fitted with a gear for driving. A recording counter records the number of revolutions in a given time; i. e., the number of times the compartments of the meter have been filled and emptied. By using two or more meters of different sizes, in conjunction with consistency regulators, the amounts of different kinds of slush pulps, clay, size, color, etc., can be accurately proportioned and measured. —A. P.-C.

The Coloring of Paper on the Paper Machine.—Emil Heuser. *Papierfabr.*, xx, 325-331 (March 19, 1922). Translation by I. Ginsberg in PAPER TRADE J., lxxv, No. 4, 49-52 (July 27, 1922), and in *Pulp and Paper*, xx, 757-761 (Sept. 7, 1922). Description of the latest developments in coloring paper on the paper machine taken from the patent literature, more particularly representing German practice. It covers coloring by the addition of solutions of coloring matter, by means of rolls, by means of differently colored pulps, and by the action of heat.—A. P.-C.

537,218.—One or more colors are applied in lines, bands, etc., either separate or overlapping one another, by means of suitable color distributing devices and doctors placed at the wet end of the machine, preferably over the presses.

537,356.—The color is applied by means of one or more perforated pipes at or near the slice which are given a reciprocating motion conforming to the shake of the wire.

537,357.—The coloring device consists of two doctors between is a color distributing member. As many of these as there are colors to be applied are used at the dry end of the machine.—A. P.-C.

Coloring Paper with Fast Pigments.— E. Arnould. *Papier*, xxv, 347-350 (Aug., 1922). The author lists the fast blue, red, yellow, brown, and black coloring matters and gives practical indications as to their use to obtain satisfactory results.—A. P.-C.

The Sizing of Boards.—*Pappen und Holzstoff Ztg.*, No. 30, 1921; Translation by P. Bartholow in *Pulp and Paper*, xx, 787-788 (Sept. 14, 1922), *Paper Mill*, xlv, No. 38, 43-44 (Sept. 30, 1922). A brief discussion of the reason of the greater difficulty experienced in sizing boards than paper.—A. P.-C.

Cotton Felts and Woolen Felts.—J. M. De Portemont. *Papier*, xxv, 375-377 (Aug., 1922). Experiments carried out with cotton and woollen felts are described which show that: (1) Cotton felt absorbs moisture more rapidly at first, but after it has absorbed a certain amount of water its absorbency is the same as that of wool; (2) water evaporates more readily from cotton felt; (3) the absolute moisture absorbing capacity of wool is greater than that of cotton. In paper mill practice (3) is without importance as the dryer felt never becomes saturated. A comparison of the life of cotton and woollen felts can be carried out only under actual working conditions in the mill.—A. P.-C.

Have You Too Much Ventilation.—J. O. Ross. PAPER TRADE J., lxxiv, No. 2, 47-49 (Jan. 12, 1922). A system supplying more air than is needed may be as poor as one with insufficient capacity if improperly designed and is very wasteful. Each system must be studied on its own merits and should not be copied from other successful installations as conditions may be entirely different in the two cases.—A. P.-C.

Removing Condensate from Paper Machine Dryers.—Papeteries Navarre. Fr. patent 538,812, March 24, 1922. *Papier*, xxv, 303-304 (July, 1922); *Papeterie*, xliv, 653-654 (July 25, 1922). A suitably lagged pipe from each dryer is led to the bottom of a tank with an overflow, of such a depth that the height of water from the overflow to the bottom just balances the steam pressure in the dryers. If the tank cannot be made deep enough, the overflow may be raised over the top of the tank, or the pipes can be provided with a throttle or reducing valve to cut down the pressure at the well. The tank or well is well lagged to prevent loss of heat and the water is used for boiler feed.—A. P.-C.

Machine for Cutting Cigarette Paper.—Universelle Cigarettenmaschinenfabrik j. c. Muller & Co. Fr. patent 539,818, April 7, 1922. *Papier*, xxv, 355-356 (Aug., 1922).—A. P.-C.

XUM

The Grinnell Dryer Applied to Wall Paper and to Coated Paper.—Jerome D. Stein. *Paper Ind.*, iv, 813, 815 (Sept., 1922); PAPER TRADE J., lxxv, No. 11, 64-65 (Sept. 14, 1922); *Paper Mill*, xlv, No. 36, 18 (Sept. 16, 1922). A brief description of the Grinnell wall paper and coated paper dryer, the fundamental principle of which is drying by the slow movement of a very large volume of only moderately heated air, together with a discussion of its merits. The main advantages are immense saving in floor space and drying time, fuel and power, and improvement in working conditions.—I. G.

Development of Coating Machines.— W. H. Waldron. PAPER TRADE J., lxxiv, No. 23, 47 (June 8, 1922); *Paper Mill*. xlv, No. 21, 48, 50 (June 3, 1922); *Paper*, xxx, No. 22, 16-17 (Aug. 2, 1922). Brief historical sketch.—A. P.-C.

The Roofing Machine.— C. S. Bird, Jr. *Paper Mill*, xlv, No. 21, 24, 66, 68 (June 3, 1922). A description of variations in present day practice in the manufacture of saturated roofing papers, with a plea for co-operation between the roofing and machine manufacturers for standardizing practice and design in roofing machines. —A. P.-C.

Building Material.—H. W. White. Can. patent 223,353, Sept. 5, 1922. The material consists of a thick layer of dry waste fibrous material (straw, dried grasses, dry leaves, etc.) treated with sufficient asphalt to saturate the individual fibers without filling the pores of the mass, faced on the inside with a layer of asphalt (or other suitable adhesive) and a sheet of felt or paper, and on the outside with a layer of asphalt, a sheet of impregnated paper, and another layer of asphalt coated with grit, sand, etc.—A. P.-C.

Shingles and Material for Making Same.—A. S. Speer and L. E. Lindley, assignors to Roofing Patents Co. Can. patent 223,401, Sept. 5, 1922. Only such portions of the felt base are coated with asphalt, sand, etc., as will be exposed to the weather.—A. P.-C.

General Equipment

Steel Belts and Their Application to the Solution of the Conveying Problem.—H. Carlson. PAPER TRADE J., lxxv, No. 11, 58-59 (Sept. 14, 1922); *Paper Mill*, xlv, No. 37, 26, 30 (Sept. 23, 1922). A discussion of the merits of steel belts as conveyors. (Compare Carlson, this journal, lxxv, No. 9, 54, Aug. 31, 1922).—I. G.

Application of Recording Instruments in the Paper and Pulp Industry.—L. G. Bean. PAPER TRADE J., lxxv, No. 11, 54-55 (Sept. 14, 1922); No. 15, 57-59 (Oct. 12, 1922). A brief discussion of the advantages of recording instruments over ordinary indicating instruments, with an enumeration of some of the uses to which they are put in pulp and in paper mills.—I. G.

Power Generating and Equipment

Safety and Efficiency Appliances for the Boiler Plant.—W. C. Edge. *Paper Ind.*, iv, 811, 813 (Sept., 1922); PAPER TRADE J., lxxv, No. 11, 62-63 (Sept. 14, 1922); *Paper Mill*, xlv, No. 36, 14, 16 (Sept. 16, 1922). A brief description of the PBH quick- closing chain-operated water gauge, PBH quick-opening self-closing gauge cock, and PBH gauge glass protector, and of the Hays differential draft gauge, Hays gas analysis instrument and Hays CO_2 and draft recorder, together with an outline of their merits.—I. G.

The Under-Feed Stoker in Paper Mill Work.—*Paper Mill*, xlv, No. 21, 58, 60, 62, 64 (June 3, 1922); PAPER TRADE J., lxxiv, No. 23, 22-26 (June 8, 1922). A description of the Jones under-feed stoker with a discussion of its merits.—A. P.-C.

Electric Steam Boilers.—G. A. Maillet. *Papeterie*, xliii, 485 (June 10, 1922). Translation by A. Papineau-Couture in PAPER TRADE J., lxxiv, No. 3, 48-50 (Jan. 19, 1922). See this journal, lxxiii, No. 19, 78, Nov. 10, 1921; No. 21, 50, Nov. 24, 1922.—A. P.-C.

Evaporation Test of a 1500 H. P. Electric Boiler.—M. C. Allin. *Paper Ind.*, iv, 781-782 (Sept., 1922). Figures are given of the results of an evaporation test which showed a boiler efficiency of 94 per cent. With coal at $8 a ton and a fair boiler efficiency, if electric power were $9.85 per H. P. year steam could be produced as cheaply electrically as by coal.—A. P.-C.

Forestry

Research Work of the Dominion Forest Service.—W. G. Wright. *Can. For. Mag.*, xviii, No. 3, 673 (March, 1922).—Discussion of the importance of the work being carried out by the Dominion Forestry Branch.—C. L.

Extensive Planting Plan to Save Ontario's Pine Supply.—E. J. Zavitz, Provincial Forester. *Can. For. Mag.*, xviii, 564 (Jan., 1922).—At present rate of cutting virgin white and red pine in Ontario represents 20 to 25 years' supply. The author estimates that for an annual expenditure of not over $200,000 10,000 acres could be reforested each year, which in 60 years should produce at least 50,000,000 board feet more than the present cut of these species. (See also summary of address by Hon. E. C. Drury, *Can. For. Mag.*, xviii, 605, Feb., 1922.)—C. L.

The Sycamores.—J. S. Illick. *Am. For.*, xxviii, 145 (March, 1922).—C. L.

A Seven Hundred Year Logging Company.—A. N. Pack. *Am. For.*, xxviii, 195 (April, 1922.)—History and management of the Schifferwald forest, a 12,000 acre portion of the Black Forest, in Germany, under continuous ownership and production for some 700 years. The forest is perpetuated by wise use. Intensive forestry practice is made possible by the existence of a market for practically the entire cubic content of the tree.—C. L.

Transplanting.—F. L. Mulford. *Am. For.*, xviii, 238 (April 1922).—Precautions to be taken in transplanting trees.—C. L.

Practical Plan to Replenish the Forests of Ontario.—R. C. Strickland. *Can. Lumberman*, xlii, 47 (March 1, 1922).—The author outlines a system comprising establishment of forest reserves in charge of trained foresters and assistants, intensive protection against fire, cancellation of existing licenses where only small timber remains, and construction of dams to flood hay meadow which would provide fire-breaks and favor the re-establishment of fur-bearing animals. Intensive administration along these lines would be largely self-supporting and would afford protection for large areas of valuable second-growth timber.—C. L.

Bird Guardians of Our Forests.—Hoyes Lloyd. *Can. For. Mag.*, xviii, 567 (Jan., 1922).—Insectivorous birds play a very important part in preventing or reducing the destruction of forests by insects. —C. L.

Quebec Awakens to Need of More Conservation.— *Can. Lumberman*, xlii, 47 (March 1, 1922).—An analysis of the forest wealth of Quebec with reference to reforestation by private interests and to the provincial nursery at Berthierville. There is need for reforestation on 4,000,000 acres of timber limits denuded by fire.—C. L.

List of Abbreviated and Full Titles and of Addresses of the Journals from Which Abstracts Have Been Prepared for This Issue

Chimie et Industrie	Chimie et Industrie. 49 Rue des Mathurins, Paris, France.
Paper	Paper. 251 West Nineteenth street, New York City.
Paper Ind	The Paper Industry. 356 Monadnock Block, Chicago, Ill.
Paper Mill	The Paper Mill and Wood Pulp News. L. D. Post, Tribune Building, 154 Nassau street, New York City.
Paper Trade J	Paper Trade Journal. 10 East Thirty-ninth street, New York City.
Papeterie	La Papeterie. 9 Rue Lagrange, Paris (9°), France.
Papier	Le Papier. 16 Rue du Rocher, Paris (5°), France.
Papierfabr	Der Papier-Fabrikant. Otto Elsner, Oranienstr. 140-142, Berlin, S. 42, Germany.
Pulp and Paper	Pulp and Paper Magazine of Canada. Gardenvale, Que.
Tech. Assoc. Papers V	Technical Association Papers, Series V. Technical Association of the Pulp and Paper Industry, 18 East Forty-first street, New York City.

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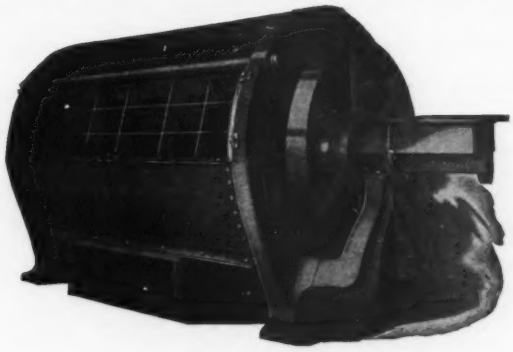

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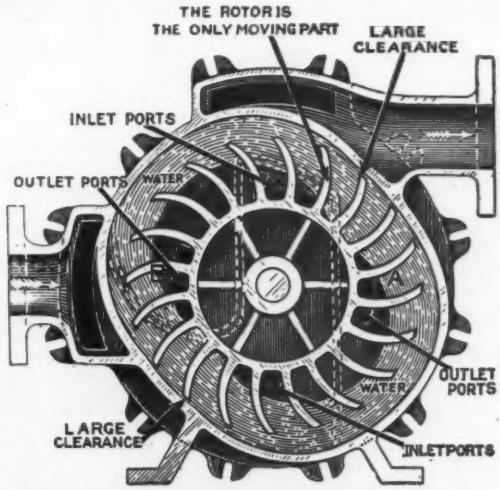

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Technical Association Papers, Series III, 1920. In paper, 60 pages, $2.

Tests for Unbleached Sulphite and Sulphate Fibers, by R. E. Lofton and M. F. Merritt.
Standard Specifications for Cement and Lime Paper Bags, by Paul L. Houston.
Use of Sulphur in Soda Pulp Cooking, by George K. Spence.
Substitutes for Alum and Rosin, by W. E. Byron Baker.
Substitutes for Alum in Papermaking, by Max Cline.
Automatic Cooking Control for Chemical Pulp, by C. H. Allen.
Automatic Mixing System for Paper Stock, by Edward J. Trimbey.
A New Felt Cleaning Device, by C. A. Woodcock.
Fireproof Hood for Paper Machines, By F. M. Williams.
Description of Emmet's Mercury-Vapor Boiler.

Technical Association Papers, Series IV, 1921. In paper, 129 pages, $3.

How to Increase the Efficiency of Water Power Plants, by Charles M. Allen.
Strength Testing of Soda Pulp, by Ralph Mair and Grellet N. Collins.
Steam Economy in Drying on and Driving of Paper Machines, by R. W. Leeper.
Burning of Pulverized Fuel in Papermill Power Plants, by Loren L. Hebberd.
Shortening Cooking Time by Preliminary Impregnation in the Production of Sulphite Pulp, by Vance P. Edwardes.
Measuring Moisture of Chips in Cooking, by F. M. Williams.
Economics of Paper Mill Electrification, by Stephen A. Staege.
The Fulton System for Drying of Paper, by William B. Fulton.
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The Effect of Variables on Bleaching Efficiency, by George K. Spence.
Briner Economizer Using Only Waste Heat for Ventilation of Machine Room, by W. H. Howell.
Rinman Modification of Sulphate Process, by Bror. N. Segerfelt.
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A Simple Moisture Content Indicator for Paper, by C. B. Whwing.
Study of the Casein Used in Coating Paper, by Clarke Marion.
Analytical and Testing Methods of the Committee on Standard Methods of Testing Materials, by E. C. Tucker.
The Analysis of Sulphite Cooking Acid, by Erik Oman.
Control Analyses of Sulphite Cooking Acid, by Prof. Dr. Peter Klason.

Technical Association Papers, Series V, 1922. In paper, 170 pages, $3.

The Power Plant of the Paper Industry, by A. G. Darling and H. W. Rogers.
A System of Records to Maintain Uniformity of Basis Weights of Paper, by Parker K. Baird.
Hydrating Machinery for the Paper Mill, by George L. Bidwell.
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Some Factors Influencing Yield and Strength of Pulp Cooked by the Soda Process, by Martin L. Griffin.
The Efficient Production of Mechanical Pulp, by Adolph F. Meyer.
Sedimentation Control of Groundwood, by W. A. Munro.
Drying of Paper, by M. B. Littlefield.
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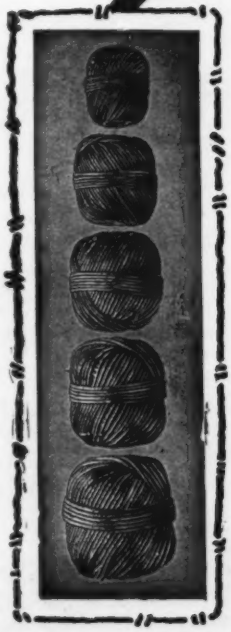

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CORDAGE

Bids and Awards for Government Paper

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., November 29, 1922.—The purchasing officer of the Government Printing Office has received the following paper bids:

3,825 lbs. 17 x 28—25½ No. 20 Yellow Bond Paper: Ætna Paper Company, $.1706 per lb.; Old Dominion Paper Company, $.1809; Dobler & Mudge, $.20; R. P. Andrews Paper Company, $.175.

4,375 lbs. 21 x 32½—87½ No. 48 Buff Commercial Ledger Paper: Whitaker Paper Company, at $.2469 per lb.; R. P. Andrews Paper Company, $.1885; Mathers-Lamm Paper Company, $.21; Old Dominion Paper Company, $.2849.

1,000,000 lbs. 22½ x 28½—104. Cream Bristol Board in 44½" rolls: Champion Coated Paper Company, $.0728 per lb.; Whitaker Paper Company, $.0763.

10 reams 40 x 60", Rope Manila Paper: Maurice O'Meara Company, $.1023 per lb., Paper Manufacturers Company, $.105; R. P. Andrews Paper Company, $.0915; Republic Bag and Paper Company, $.1039.

Bids will be received at the Government Printing Office on December 6, for the following:

36,000 lbs. High Machine Finish White Writing Paper, No. 13, in 21" rolls;

750 lbs. (75 reams) 17 x 22—10. White French Folio Paper.

400,000 lbs. 26 x 38—35. White Machine Finish Printing Paper, in 38" rolls;

4,375 lbs. 21 x 32½—87½. Salmon Commercial Ledger Paper.

4,000 lbs. 21 x 32½—109½. Commercial Ledger Paper.

The purchasing officer of the Government Printing Office will open bids on December 4, for 54,000 lbs. (800 reams) of White Rag Machine Finish Printing Paper and 190 yds. Burlap and Asphaltum Lined Paper 40" wide.

The Ætna Paper Company has been awarded the contract by the Purchasing Officer of the Government Printing Office for furnishing 3,825 (150 reams) of 17 x 28—25½. No. 20 yellow glazed bond paper at $.1706 per pound, bids for which were opened on November 22.

The Old Dominion Paper Company has been awarded the contract by the Purchasing Officer of the Government Printing Office for furnishing 56,000 pounds of writing paper high M. F. No. 13 in 18" and 23" rolls, at $.0819 per pound, bids for which were opened on November 15.

Knowlton Brothers Company has been awarded the contract for furnishing 9,600 pounds of 20 x 24—48. Dawn colored rough cover paper at $.0859 and the same firm will also furnish 4,800 pounds of the same suede color at $.0881 per pound. Thomas Barrett and Sons will furnish 4,800 pounds of goblin blue and 2,400 pounds of khaki color at $.0883. Bids for this paper were opened on November 17.

The Mathers-Lamm Paper Company has been awarded the contract by the Purchasing Officer of the Government Printing Office for furnishing 5,500 pounds of oiled manila tympan paper in 38 and 48" rolls at $.089 per pound, bids for which were opened on November 3.

The Maurice O'Meara Paper Company, has been awarded the contract by the Bureau of Supplies and Accounts, Navy Department, for furnishing 1,500 reams of mimeograph paper at $658.50, bids for which were opened on November 14.

Dobler and Mudge have been awarded the contract by the Purchasing Officer of the Government Printing Office for furnishing 215,000 pounds (2,500 reams) of 38 x 48—86 white S. and S. C. printing paper at $.0732 per pound.

The Whitaker Paper Company will furnish 800 pounds (100 reams) of 20 x 30—8 white tissue paper at $1.37 per ream and the Mathers-Lamm Paper Company will furnish 1,000 sheets of 20 x 31" brown paperoid at $49.50 per thousand. Bids for these items were opened on November 17.

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Statistics of the Federal Trade Commission Show That Mill Stocks at the End of the Month of Ground Wood Equaled Twenty-eight Days' Average Output, of News Grade Sulphite Equaled Nine Days' Average Output, of Bleached Sulphite Equaled Six Days' Average Output, of Easy Bleaching Sulphite Equaled Six Days' Average Output and Mitscherlich Equaled Nine Days' Output.

[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., November 27, 1922.—In connection with the Federal Trade Commission's statistics of the paper industry, a summary of the monthly reports from manufacturers of wood pulp and other kinds of pulp used in papermaking is submitted herewith for the month of September, 1922. The table shows the kind of pulp, the stocks, production, pulp used and shipments for the month. The pulp shipped during each month represents only pulp shipped to a concern different from the one producing it. Loss of production is shown by giving the idle time reported by each company for each kind of pulp.

Pulp Production

The following is a tabulation of the production, pulp used by the company producing it, shipments to outside concerns, and stocks of finished pulp in tons of 2,000 pounds on an air-dry basis, for September, 1922, compared with September, 1921, for the operating mills. The average production is based upon the reports covering the years 1917 to 1921, inclusive, and the average stocks are based upon the stocks carried for the years 1919, 1920, and 1921.

	Number of mills	On hand 1st of month	Production for month	Used during month	Shipped during month	On hand end of month
Ground Wood Pulp:		Net tons	Net tons	Net tons	Net tons	Net tons
September, 1922	158	157,515	102,350	122,342	10,325	127,198
September, 1921	164	166,601	66,965	89,474	6,420	137,672
September, 1920	163	113,499	104,975	113,210	12,441	92,823
September, 1919	159	153,505	91,648	105,546	8,116	131,491
Average	...	.....	115,150	.....	.....	147,073
Sulphite, News Grade:						
September, 1922	60	21,343	59,998	53,515	5,454	22,372
September, 1921	67	22,603	49,835	42,028	6,887	23,523
September, 1920	64	12,731	68,752	57,601	10,731	13,151
September, 1919	62	20,589	64,064	55,523	9,724	19,406
Average	...	.....	60,125	.....	.....	20,685
Sulphite, Bleached:						
September, 1922	33	12,775	42,449	26,205	18,832	10,187
September, 1921	33	10,805	30,151	18,305	15,926	6,725
September, 1920	32	5,722	48,912	27,090	22,718	4,826
September, 1919	30	11,593	46,412	24,093	23,346	10,566
Average	...	.....	39,800	.....	.....	9,507
Sulphite, Easy Bleaching:						
September, 1922	12	1,088	4,957	4,192	491	1,362
September, 1921	9	605	3,553	2,919	550	689
September, 1920	9	1,103	7,251	4,301	2,667	1,386
September, 1919	8	1,624	5,935	3,457	2,207	1,895
Average	...	.....	6,000	.....	.....	1,346
Sulphite, Mitscherlich:						
September, 1922	7	1,909	5,867	3,679	1,996	2,101
September, 1921	7	2,313	5,265	3,175	2,829	1,574
September, 1920	7	1,112	6,814	4,204	2,807	915
September, 1919	7	1,503	7,445	4,234	3,042	1,672
Average	...	.....	6,125	.....	.....	1,831
Sulphate Pulp:						
September, 1922	23	7,344	24,249	17,509	5,606	8,478
September, 1921	21	7,974	14,760	11,866	3,256	7,612
September, 1920	21	2,896	20,077	13,955	5,481	3,537
September, 1919	20	5,638	16,258	9,944	5,311	6,641
Average	...	.....	13,050	.....	.....	6,499
Soda Pulp:						
September, 1922	28	7,558	31,873	21,396	11,500	6,535
September, 1921	27	9,006	22,435	16,345	6,484	8,612
September, 1920	27	4,881	36,764	19,878	17,112	4,655
September, 1919	27	7,063	34,437	19,266	15,358	6,876
Average	...	.....	29,800	.....	.....	6,931
Other than Wood Pulp:						
September, 1922	6	425	936	963	114	284
September, 1921	5	136	515	497	107	47
September, 1920	4	65	368	265	123	45
September, 1919	5	386	716	885	85	182
Average	...	.....	800	.....	.....	154
Total—for all grades:						
September, 1922	...	209,957	272,679	249,801	54,318	178,517
September, 1921	...	220,043	193,479	184,609	42,459	186,454
September, 1920	...	142,009	293,913	240,504	74,080	121,338
September, 1919	...	201,901	266,915	222,898	67,189	178,729
Average	...	.....	270,850	.....	.....	194,026

Total stocks of all grades of pulp in the mills on September 30 amounted to 178,517 tons. Mill stocks of news grade, easy bleaching, Mitscherlich, and sulphate pulp increased during the month; stocks of all other grades decreased.

Ratio of Stocks to Average Production

Comparing the stocks on hand at the domestic pulp mills at the end of the month with their average daily production based on the reports covering the years 1917-1921, inclusive, the figures show that:

Groundwood pulp stocks equal 28 days' average output.
News grade sulphite mill stocks equal 9 days' average output.
Bleached sulphite mill stocks equal 6 days' average output.
Easy bleaching sulphite mill stocks equal 6 days' average output.
Mitscherlich sulphite mill stocks equal 9 days' average output.
Sulphate mill stocks equal 16 days' average output.
Soda pulp mill stocks equal 5 days' average output.

(*Contiued on page 66*)

Loss of Production

MONTH OF SEPTEMBER, 1922 (WITH SEPTEMBER, 1921, FOR COMPARISON)

Grade	Lack of Orders 1922	Lack of Orders 1921	Repairs 1922	Repairs 1921	Other Reasons 1922	Other Reasons 1921	Total 1922	Total 1921
Ground Wood Pulp:								
Number of grinders	42	91	176	42	620	617	838	750
Total hours idle	8,206	18,890	11,463	6,706	143,838*	195,582	163,507	121,178
Sulphite, News Grade :								
Number of digesters	11	33	6	11	11	28	28	72
Total hours idle	1,645	6,424	1,622	1,859	3,086	6,246	6,353	14,529
Sulphite, Bleached:								
Number of digester	15	73	9	22	22	9	46	104
Total hours idle	754	7,191	165	1,120	2,659	1,746	3,578	10,057
Sulphite, Easy Bleaching:								
Number of digesters	6	0	2	0	2	8	10	8
Total hours idle	432	0	39	0	188	1,632	659	1,632
Sulphite, Mitscherlich:								
Number of digesters	0	9	26	7	0	0	26	16
Total hours idle	0	432	953	1,001	0	0	953	1,433
Sulphate Pulp:								
Number of digesters	0	33	3	4	8	6	11	13
Total hours idle	0	109	118	301	1,685	1,692	1,803	2,102
Soda Pulp:								
Number of digesters	8	109	0	12	21	35	29	156
Total hours idle	624	15,931	0	3,821	3,020	2,711	3,644	22,463
Other Grades:								
Number of digesters	0	6	0	0	5	0	5	6
Total hours idle	0	1,420	0	0	1,332	0	1,332	1,420
Total number of machines	82	324	222	98	689	703	993	1,125
Total hours idle	11,661	50,397	14,360	14,808	155,808	209,609	181,829	174,814

*Includes 104,160 hours due to water and power conditions.

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Trade Marks Department

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The following are trade-mark applications pertinent to paper and pulp field pending in the United States Patent Office which have been passed for publication and are in the line for early registration unless opposition is filed promptly. For further information address National Trade-Mark Company, Barrister building, Washington, D. C., or Bush building, 130 West Forty-second street, New York, trade-mark specialists.

As an additional service feature to its readers, the PAPER TRADE JOURNAL gladly offers to them an advance search free of charge, on any mark they may contemplate adopting or registering.

ADJUSTMENT—No. 168,839. Collins Manufacturing Company, Holyoke, Mass. For bond and ledger writing and printing paper.

EQUIPMENT—No. 168,832. Collins Manufacturing Company, Holyoke, Mass. For bond writing and printing paper.

YEOMAN—No. 168,831. Collins Manufacturing Company, Holyoke, Mass. For ledger writing and printing paper.

STAMSO within a diamond. No. 168,826. Collins Manufacturing Company, Holyoke, Mass. For bond, ledger, and superfine writing and printing paper.

BURT—No. 160,045. F. N. Burt Company, Limited, Buffalo, N. Y. For paper boxes.

L-S-S-Co., on panel below head of Abraham Lincoln. No. 167,103. Samuel C. Stephenson, Lincoln, Neb. For printed forms, loose leaf covers, loose leaf filler, blank books, order books, plan books, bookmarks, print paper, writing paper, blotting paper, and wrapping paper.

FINLAND on panel below picture of roll of paper and pine tree within triangle. No. 167,546. Finska Paperbruksforeningen, Helsingfors, Finland. For printing paper, wrapping paper, writing paper and envelopes.

TRITON—No. 169,644. The Miami Paper Company, West Carrollton, Ohio. For bond and ledger paper for writing and printing purposes.

"ITSAPEECH"—No. 169,370. Emil Morris, Detroit, Mich. For headrest paper.

ARTISAN—No. 169,119. J. W. Butler Paper Company, Chicago. For printing, writing, book and cover papers.

AMBASSADOR—No. 169,118. J. W. Butler Paper Company, Chicago. For printing, book, and cover papers.

SENTRY—No. 169,063. Lee Paper Company, Vicksburg, Mich. For bond paper for writing, ledger, and printing purposes.

HOUSEWIFE above picture of housewife in kitchen. No. 167,996, Paper Service Company, Inc., Hinsdale, N. H. For roll toilet paper.

ASPHALT-IN—No. 160,656. S. Austin Bicking Paper Manufacturing Company, East Downington, Pa. For sheathing paper, building paper, lining paper used in lining shipping cases, refrigerators and railway cars.

SCOTCH BELLE across picture of thistle within a circle—No. 170,-141. Inlander-Steindler Paper Company, Chicago, Ill. For toilet paper.

MORNING GLORY, above picture of morning glories—No. 170,050. Beaver Paper Company, Chicago. For toilet paper.

CULTURE—No. 170,031. Manhattan Card and Paper Company, New York. For paper used for printing, writing, bookkeeping, and typewriting and mailing envelopes.

STRYPE, Save the Surface And You Save All—No. 169,791. Fred C. Strype, New York. For wrapping paper, waxed parchment, and grease-proof, gummed and glassine paper, tissue paper, book and writing paper.

Send It To The Laundry, with word STRIPE on disc in center—No. 169,790. Fred C. Strype, New York. For wrapping paper, waxed parchment, and greaseproof paper, gummed and glassine paper, tissue paper, and book and writing paper.

MUSTANG, on rim of circle with picture of a mustang in center—No. 169,349. Crown Williamette Paper Company, San Francisco, Cal. For paper bags.

WILLKIN—No. 160,496. William H. King, Jr., East Orange N. J., and New York. For typewriter paper.

GOLDEN, above picture of sunrise—No. 146,587. Osborn Paper Company, Marion, Inc. For writing tablets, writing and printing paper, mailing and correspondence envelopes, and papeteries.

WOOD PULP PRODUCTION FOR SEPTEMBER

(*Continued from page* 64)

Mill stocks of "other than wood pulp" equal 9 days' average ouput.

Total mill stocks of all grades equal 16 days' average output.

Loss of Production

The idle machine time of grinders and digesters reported to the Commission for the month of September, 1922, is shown in the attached tabulation. The number of grinders and digesters include only those for which idle time was reported during the month. The total number of machines may include duplications because the report may count the same machine twice if idle for different reasons during the different parts of the month. The reasons tabulated for lost time are "lack of orders" and "repairs." "Other reasons" include water conditions, etc. The time lost in September, 1921, is shown by grades and reasons for purposes of comparison. Neither the number of machines nor hours idle include idle machines and the time lost in 16 mills not in operation during the month.

Increase in Lumber Cuts

The Nashwaak Pulp and Paper's lumber cut will be about 50 per cent more than was anticipated some weeks ago and will be three times as great as that of last year. Contracts have been completed for a cut of 15,000,000 feet which the season's work should produce.

The lumber cut on the Restigouche River and tributaries extending into the Province of Quebec is conservatively estimated at between 75,000,000 and 80,000,000 feet. Such a cut is three times as great as that made last season, when between 25,000,000 and 30,000,000 feet of lumber were cut in that district. It is also quite possible that estimate will be exceeded almost to the 100,000,000 mark.

News of the Chicago Trade

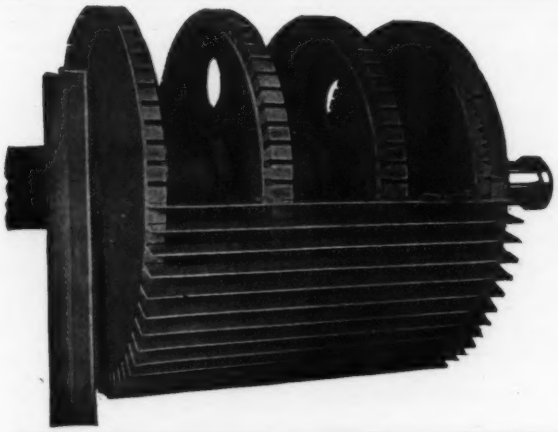
[FROM OUR REGULAR CORRESPONDENT.]

CHICAGO, November 20, 1922.—The Chicago trade reports a slightly increased demand for paper. Jobbers are exceptionally busy figuring prices and suggesting quality and weight of papers to be used for special purposes. Salesmen are kept busy on the telephone answering questions and quoting prices; frequently orders are booked, but as one sales manager put it today, it is uphill work and there is no rest for the sales department. Prices are firm, the increases put in effect the latter part of September being general throughout the city. The outlook is said to be constantly growing more encouraging.

Chicago visitors of the past week were: Joe Peirie, Neenah Paper Company, Neenah, Wis. George Gilky, Michigan Paper Company, Kalamazoo, Mich. George Gerpheide, Allied Paper Mills, Kalamazoo, Mich. George Eastwood, Parsons Paper Company, Holyoke, Mass. Frank Dunifer, Miami Paper Company, West Carrollton, Ohio. A. P. Story, Chillicothe Paper Company, Chillicothe, Ohio. Albert Gilbert, Gilbert Paper Company, Neenah, Wis.

J. D. Wallace & Co., 1401-17 West Jackson Boulevard, have taken over the sale of the Clay Hog, manufactured by the Vibrating Machinery Company of Chicago. This device was fully described and illustrated in a paper by Julius Schroeter of Chicago, entitled "Clay Milk and Colors," which was printed in the PAPER TRADE JOURNAL of August 25, 1921.

XUM



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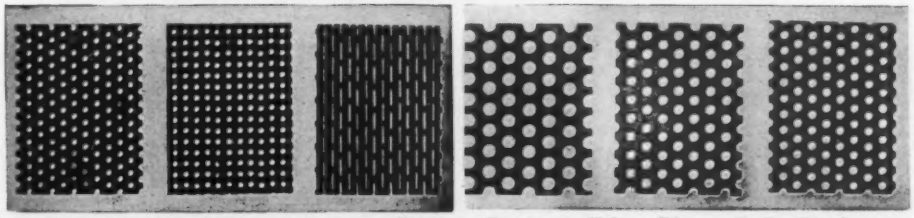

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Buys Merwin Paper Co. at Windsor

Chester N. Stevens who has held responsible positions with the Barrett Company, well-known roofing manufacturers, for many years, has just purchased the Merwin Paper Company at Windsor, Conn. The Gibbs-Brower Company, paper and pulp mill broker, under sole selling agency contract sold this mill to Mr. Stevens and his associates for R. B. Newell, vice-president of the Fidelity Trust Company of Hartford, Conn., acting as liquidating agent for the trustees of the Merwin Paper Company.

The Merwin Paper Company began business many years ago at Windsor, Conn., near Hartford, and has developed from a small water power mill to its present modern, hydro-electrically equipped plant. The output of the mill has always been a very high grade and has enjoyed excellent reputation.

Mr. Stevens' organization will be known as The Stevens Paper Mills, Inc., with headquarters at 52 Vanderbilt avenue, New York city, and paper specialties for industrial uses will be manufactured at the mill. According to Mr. Stevens the present plan is to produce two or three grades of paper, the demand for which is immediate in a concentrated territory. These grades will include jacquard board and press board used in the textile industry and fiber board used for insulation in electrical work.

The actual operation of the mill is under the direction of George C. Russell, vice-president of the new company, who for the past fifteen years has managed two mills of the Barrett Company. By his purchase of this property Mr. Stevens has achieved his life-long ambition of becoming a paper mill owner, having come from a papermaking family and having operated and managed some of the Barrett Company's largest properties. There is no doubt that the outstanding ability and long experience of Mr. Stevens will insure the success of this venture.

May Build $750,000 Mill at Ogdensburg

[FROM OUR REGULAR CORRESPONDENT]

WATERTOWN, N. Y., November 27, 1922.—A new paper mill plant which will cost about $750,000, being an expansion of the Ogdensburg Paper and Pulp Company located on the shore of the St. Lawrence river at Ogdensburg, is now being organized. Frank A. Augsbury and E. L. Strong, both prominent paper manufacturers, are back of the proposition and the Chamber of Commerce of Ogdensburg is lending moral active support.

Mr. Augsbury and Mr. Strong have been working on the proposition for some time as alleged representatives of capitalists who would build the mill and manufacture paper. It is not announced as to the details of the plant but it is understood that plans are already being drawn and that when placed in operation 300 employees will be added to the present force of the pulp mill.

The plant will be under the direct management of A. M. McKee, who for the past 10 years has been general manager of the Donaconna Paper Company mills in Quebec. There was a recent report that Mr. McKee was scheduled to accept a position with the St. Regis Paper Company, but reports in Ogdensburg indicate otherwise.

A special meeting of those interested is scheduled for 10 o'clock Tuesday morning in the Chamber of Commerce rooms in Ogdensburg, at which time it is expected a definite decision will be reached.

Ashland Paper Co. Mill Resumes

APPLETON, Wis., November 28, 1922.—The Ashland Paper Company mill at Ashland, Wis., idle for about five months, resumed operations last week and expects to continue all winter, providing employment to quite a large crew.

The paper mill, until a month ago, was under the control of the Tuttle Press of Appleton, manufacturing most of the material required by that company. About a month ago the controlling interest was disposed of to a group of men said to be headed by M. C. Connors who is president of the company.

It is reported from Ashland that the company is considering installation of new machinery and a quite substantial expansion. The paper mill is receiving part of its pulp from Canada and part from mills in the central part of the State. Fine tissues, napkins and fruit wrapper papers are made.

The Tuttle Press still is purchasing some of its raw material from the Ashland plant but the bulk of it is obtained from other sources. Ability to buy at better advantage from other sources is said to have prompted the Appleton Company to permit the Ashland mill to stand idle for several months.

Want Casein Placed on Free List Again

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., November 27, 1922.—Martin Cantine of the Martin Cantine Paper Company, chairman of a committee representing 75 coated paper manufacturers has submitted to the United States Tariff Commission an application to have casein again placed on the free list. It will be remembered that the Senate put a duty of 2½ cents per pound on casein. Mr. Cantine in submitting his application to the Tariff Commission among other things stated that "The establishment of a duty on casein or lacterine was levied not based on a true and accurate statement of the facts and works a particular hardship upon coated paper manufacturers of this country and is not substantiated by economic conditions existent in the United States."

It was stated also that the price of casein has risen from 8 @ 9½ cents in January to 16 to 20 cents in October.

F. P. Veitch to Be Specifications Chairman

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., November 29, 1922.—F. B. Veitch, chief of the Paper Laboratory of the Bureau of Chemistry, Department of Agriculture, was named chairman of the Paper Specifications Committee of the Joint Congressional Committee on Printing at its initial meeting last week. The report of the Specifications Committee will be in the hands of the Joint Committee on Printing not later than December 6. It is not expected that many changes will be made in the paper specifications.

To Be Chief of Forest Products Division of Tariff

[FROM OUR REGULAR CORRESPONDENT.]

WASHINGTON, D. C., November 29, 1922.—Franklin H. Smith, former assistant secretary of the National Lumber Manufacturers' Association, has become associated with the United States Tariff Commission as chief of the Forest Products Division of the commission. In this work Mr. Smith will have charge of lumber and paper. Mr. Smith, before becoming associated with the National Lumber Manufacturers' Association, was for many years connected with the United States Forest Service.

To Represent Howard and Aetna Paper Cos.

[FROM OUR REGULAR CORRESPONDENT.]

URBANA, Ohio, November 27, 1922.—The Howard Paper Company of Urbana and Ætna Paper Company, of Dayton, Ohio, wish to announce that Fred P. Whiteley, has accepted position as their Western sales manager, and will have his offices at 1148 Otis Building, Chicago.

Mr. Whiteley has, for the past eleven years, been general sales manager of the Munising Paper Company, of Munising, Mich.

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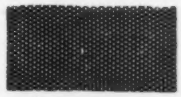

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New York Market Review

OFFICE OF THE PAPER TRADE JOURNAL,
TUESDAY, NOVEMBER 28, 1922

The advent of the last month of 1922 and the winding up of November business has been accompanied in the past week by substantial progress and exceptionally healthy activity in practically every branch of the paper industry. News print has continued to smash all previous consumption records, book and fine papers have enlivened appreciably, tissues are in heavy demand, kraft is unusually firm, and the pulp markets are continuing to maintain their high level of prices. Considering the difficulties presented by the various railroad embargoes, lighterage congestion, car shortage and scarcity of raw materials, the markets in and around New York is probably in as promising a position as it has been at any time during the past year.

According to several prominent book and fine paper men of the city, the bulk of holiday buying has been done, as has most contract purchasing for the current year. Paper salesmen are, nevertheless, picking up orders here and there for moderate sized amounts, to "fill in" publishers' or booksellers' requirements until January 1. The paper stock market has continued to decline, particularly in the lower grades of waste paper, while both rags and twine have remained relatively quiet throughout the week.

News print's record run continues unbroken, and reports from leading producers indicate that there will be no let up in the demand. To hold the justifiably high advertising rates that now prevail, newspaper publishers are resorting to every circulation building expedient at their command. Thousands of double-sized issues containing all manner of special features, throughout the country, may account in part for the overwhelming use of this commodity. The most recent statistics show that the total consumption for the first ten months of the present year exceeds that of the first ten months in 1920 by 15 to 18 per cent. It will be remembered that 1920 was the previous record year in point of quantity of news print used.

Book paper strengthened its position slightly in the past week when exports picked up to a certain extent, but manufacturers do not expect a revival of unusually heavy business until after the first of the year. Prices are regarded as steady to firm and the majority of manufacturers are inclined to believe that the slump is rapidly nearing its end.

Practically the same condition prevails in the fine paper market, holiday business rapidly drawing to a close with the coming of December. Dealers report a more active demand for the better grades of bond and writing papers.

The tissue market has had its share of hardships in recent weeks, although production difficulties are slowly being overcome. The demand from the textile and shoe industries has been very heavy and stocks in the hands of jobbers are on the ragged edge of depletion. Prices are still quoted by manufacturers from week to week, owing to the unsettled production and transportation conditions and prices as listed in Market Quotations must be regarded as nominal.

Krafts have been moving actively to consumers, the market holding its strong tone of the past few weeks. Wrapping paper imports have fallen off to some extent, although sizeable lots of the commodity are still coming in on old contracts.

Board prices rule quite firm owing to the fact that the car shortage, scarcity and high prices of raw materials (other than the lower grades of waste paper) and the railroad embargoes have more than offset the comparatively easy price tone in the paper stock market.

Mechanical Pulp

Declining stocks have marked the heavy inroads made recently upon the available supplies of ground wood, and lack of sufficient water has hampered grinding operations somewhat. The market is exceptionally strong as is evidenced by the fact that the high price of $36 to $42 on No. 1 prime domestic spruce pulp for prompt shipment, has held for several weeks. Imported ground wood is scarcely more than $2 per ton higher than the domestic.

Chemical Pulp

While pulp importers are finding domestic mills well filled with contract orders covering the balance of 1922, a continuance of the heavy demand that has prevailed for several months in this market was reported during the past week. From a price standpoint, there have been practically no alterations in this market, every grade maintaining its present high level. Soda pulp, quoted at 4.25 to 4.50 cents a pound, has been in excellent call by book paper and board manufacturers and most other grades, both imported and domestic, have been moving with similar briskness.

Old Rope and Bagging

Old rope has shown considerable evidence of stability during the past week, paper manufacturers having taken up goodly quantities of the No. 1 Domestic Manila quality at prices ranging to 6.00 cents a pound.

Bagging has continued to remain comparatively inactive in the past week, with the possible exception of No. 1 scrap. This grade has been in excellent demand, whereas the roofing qualities have failed to emerge from the rut into which they slumped over a month ago.

Waste Paper

While there are no definite indications pointing to a definite improvement in the lower grade of waste paper, it is generally believed that the undertone of the market has taken a turn for the better in the past week. An acute shortage of freight cars still seriously handicaps normal business and transportation conditions in the East are still harassing the movement of goods. Manufacturers are reported to be buying more actively and it is believed that with the lifting of a few embargoes the entire market will take a pronounced upward turn due to the influx of business resulting from the low prices which now prevail in the lower grades.

Rags

The current demand for papermaking grades of rags is more or less of a hand-to-mouth character, but mills are reported to be covered on contract orders for the next six weeks to two months. Dealing in the better grades has been more active, while the bulkier qualities have been comparatively slow moving as a result of transportation congestions and the difficulties involved in storing these grades. Imported rags for papermaking purposes have decreased in volume since August of this year, during which month 14,424,928 pounds, valued at $171,806 were brought into the port of Philadelphia alone.

Twine

Still awaiting the necessary impetus to force prices up to a level which would correspond to that taken by other raw materials, twine has continued to gain in firmness while prices remain constant. Dealers look for a general increase in quoted prices to take place within the next 30 to 60 days.

Judson G. Rosebush Heads Y. M. C. A.

[FROM OUR REGULAR CORRESPONDENT.]

APPLETON, Wis., November 27, 1922.—Judson G. Rosebush, president of the Patten Paper Company has returned from Atlantic City, N. J., where he was elected president of the International Y. M. C. A. convention, the supreme governing body of the Y. M. C. A. of the world. Mr. Rosebush presided at all the meetings of the convention which was attended by more than 6,000 visitors and delegates from almost every country on earth.

XUM

Market Quotations

Paper Company Securities

New York Stock Exchange closing quotations November 28, 1922:

	BID	ASKED
American Writing Paper Company, pref.	26½	27½
International Paper Company, com.	48	48¾
International Paper Company, pref., stamped	71	72½
Union Bag & Paper Corporation	67	68

Paper

F. o. b. Mill.

Ledgers	11.00	@	38.00
Bonds	9.00	@	55.00
Writings—			
Extra Superfine	16.00	@	35.00
Superfine	14.00	@	30.00
Tub Sized	10.00	@	15.00
Engine Sized	8.50	@	11.00
News—f. o. b. Mill—			
Rolls, contract	3.85	@	4.00
Rolls, transit	4.00	@	—
Sheets	4.00	@	—
Side Runs	3.25	@	3.50
Book, Cased—f. o. b. Mill			
S. & S. C.	7.50	@	12.00
M. F.	7.00	@	10.00
Coated and Enamel	9.00	@	14.00
Lithograph	9.00	@	14.00
Tissues—f. o. b. Mill			
White, No. 1	.95	@	1.10
Colored	1.25	@	2.50
Anti-Tarnish	1.75	@	2.25
Silver Tissue	—	@	—
Manila	.90	@	1.00
Kraft—f. o. b. Mill—			
No. 1 Domestic	7.00	@	7.50
No. 2 Domestic	6.50	@	6.75
Imported	6.50	@	7.00
Screenings	3.15	@	3.40
Manila—			
No. 1 Jute	8.50	@	9.00
No. 2 Jute	7.75	@	8.50
No. 1 Wood	4.50	@	5.50
No. 2 Wood	4.00	@	4.50
Butchers	4.25	@	4.75
Fiber Papers—			
No. 1 Fiber	6.00	@	6.25
No. 2 Fiber	5.25	@	5.50
Common Bogus	3.50	@	—
Card Middies	4.00	@	5.00
Boards—per ton—			
News	65.00	@	70.00
Straw	—	@	—
Chip	60.00	@	—
Binders' Board	80.00	@	90.00
Sgl. Mla. Ll.Chip	70.00	@	—
Wood Pulp	—	@	—
Container	—	@	—
Wax Paper—			
Self Sealing White 28 and 30 lb. basis	11.00	@	12.00
Waxed Tissue	1.60	@	1.80
Glassine—			
Bleached, basis 25 lbs.	All quotations withdrawn		
Bleached, basis 20 lbs.			

Mechanical Pulp

(Ex-Dock)

No. 1 Imported	38.00	@	45.00
No. 1 Domestic	36.00	@	42.00

(F. o. b. Pulp Mills.)

Chemical Pulp

(Ex-Dock, Atlantic Ports.)

Sulphite (Imported)—			
Bleached	4.50	@	5.00
Easy Bleaching	3.00	@	3.25
No. 1 strong unbleached	2.90	@	3.20
No. 2 Strong unbleached	2.65	@	3.00
No. 1 Kraft	3.00	@	3.25
Sulphate—			
Bleached	4.00	@	4.25

(F. o. b. Pulp Mill.)

Sulphite (Domestic)—			
Bleached	4.75	@	5.25
Strong unbl'chd.	2.90	@	3.20
Easy Bleaching Sulphite	3.00	@	3.25
News Sulphite	2.75	@	3.00
Mitscherlich	3.00	@	3.25
Kraft (Domestic)	3.00	@	3.25
Soda Bleached	4.25	@	4.50

Domestic Rags

New

Prices to Mill, f. o. b. N. Y.

Shirt Cuttings—			
New White, No. 1	11.50	@	12.00
New White, No. 2	6.50	@	7.00
Silesias, No. 1	7.50	@	8.00
New Unbleached	9.00	@	9.50
Washables	4.50	@	5.00
Fancy	6.25	@	6.75
Cotton—according to Grades—			
Blue Overall	5.50	@	6.00
New Blue	4.75	@	5.00
New Black Soft	5.50	@	6.00
New Light Seconds	2.75	@	3.00
O. D. Khaki Cuttings	4.00	@	4.50
Men's Corduroy	3.00	@	3.25
New Canvas	7.00	@	7.25
New Black Mixed	2.50	@	2.75

Old

White, No. 1—			
Repacked	6.50	@	6.75
Miscellaneous	5.50	@	5.75
White, No. 2—			
Repacked	3.25	@	3.50
Miscellaneous	5.50	@	5.75
St. Soiled White	1.75	@	1.85
Thirds and Blues—			
Repacked	1.90	@	2.10
Miscellaneous	1.50	@	1.60
Black stockings	2.90	@	3.25
Roofing Rags—			
Cloth Strippings	1.10	@	1.20
No. 1	1.10	@	1.20
No. 2	1.00	@	1.10
No. 3	.80	@	.90
No. 4	.80	@	.90
No. 5A	1.00	@	1.10

Foreign Rags

New Light Silesias	6.00		nominal
Light Flannelettes	6.75		nominal
Unbl'chd Cottons	7.50		nominal
New White Cuttings	9.50		nominal
New Light Oxfords	6.00		nominal
New Light Prints	4.50		nominal
New Mixed Cuttings	2.00	@	2.50
New Dark Cuttings	1.90	@	2.10
No. 1 White Linens	9.00	@	11.00
No. 2 White Linens	6.50		nominal
No. 3 White Linens	5.00		nominal
No. 4 White Linens	3.50		nominal
Old Extra Light Prints	2.00		nominal
Ord. Light Prints	1.75		nominal
Med. Light Prints	1.50		nominal
Dutch Blue Cottons	1.85		nominal
German Blue Cottons	1.60	@	1.70
Ger. Blue Linens	3.50		nominal
Checks and Blues	1.50		nominal
Dark Cottons	1.30	@	1.35
Shoppery	1.00	@	1.05
French Blues	1.75	@	2.00

Bagging

Prices to Mill f. o. b. N. Y.

Gunny No. 1—			
Foreign	1.00	@	1.10
Domestic	1.00	@	1.10
Wool, Tares, light	1.45	@	1.55
Wool, Tares, heavy	1.40	@	1.50
Bright Bagging	1.05	@	1.20
No. 1 Scrap	1.05	@	1.20
Sound Bagging	.85	@	.95
Manila Rope—			
Foreign	5.75	@	6.00
Domestic	6.00	@	6.25
New Bu. Cut	2.25	@	2.45
Hessian Jute Threads—			
Foreign	2.25	@	2.50
Domestic	2.20	@	2.40
Mixed Strings	.90	@	1.00

Twines

Cotton—(F. o. b. Mill)			
No. 1	.35	@	.37
No. 2	.31	@	.33
No. 3	.37	@	.39
India, No. 6 basis—			
Light	.20	@	.21
Dark	.19	@	.20
B. C. 18 Basis	.41	@	.42
A. B. Italian, 18 Basis	.51	@	.61
Finished Jute—			
Dark, 18 basis	.29	@	.30
Light, 18 basis	.26	@	.27
Jute Wrapping, 3-6 Ply—			
No. 1	.23	@	.24
No. 2	.21	@	.22
Tube Rope—			
4-ply and larger	.15	@	.17
Fine Tube Yarn—			
5-ply and larger	.19	@	.21
4-ply	.20	@	.22
3-ply	.20	@	.22
Unfinished India—			
Basis	.16	@	.17
Paper Makers Twine Balls	.13	@	.15
Box Twine, 2-3 ply	.18	@	.19
Jute Rope	.17	@	.20
Amer. Hemp, 6	.33	@	.35
Sisal Hay Rope—			
No. 1 Basis	.15	@	.17
No. 2 Basis	.13	@	.15
Sisal Lath Yarn—			
No. 1	.14	@	.15
No. 2	.11	@	.13
Manila Rope	.18	@	.19

Old Waste Papers

(F. o. b. New York)

Shavings—			
Hard, White, No. 1	4.40	@	4.60
Hard, White, No. 2	3.75	@	4.25
Soft, White, No. 1	3.75	@	3.90
Flat Stock—			
Stitchless	2.65	@	2.70
Over Issue Mag.	2.75	@	2.75
Solid Flat Book	2.45	@	2.50
Crumpled No. 1	2.10	@	2.15
Solid Book Ledger	3.00	@	3.25
Ledger Stock	2.70	@	2.80
New B. B. Chips	1.00	@	1.10
Manilas—			
New Env. Cut	2.50	@	2.60
New Cut No. 1	2.00	@	2.10
Extra No. 1 Old	1.80	@	1.90
Print	1.55	@	1.65
Container Board	1.25	@	1.35
Bogus Wrapper	1.10	@	1.20
Old Krafts, machine compressed Bales	2.15	@	2.25
News—			
No. 1 White News	2.00	@	2.10
Strictly Overissue	1.20	@	1.30
Strictly Folded	1.00	@	1.05
No. 1 Mixed Paper	.75	@	.85
Common Paper	.60	@	.65

CHICAGO

[FROM OUR REGULAR CORRESPONDENT]

Paper

F. o. b. Mill

All Rag Bond	35	@	40
No. 1 Rag Bond	30	@	35
No. 2 Rag Bond	18	@	25
Water Marked Sulphite	10	@	14
Sulphite Bond	9½	@	12
Sulphite Ledger	12	@	14
Superfine Writing	18	@	24
No. 1 Fine Writing	14	@	22
No. 2 Fine Writing	12	@	20
No. 3 Fine Writing	9	@	12
No. 1 M. F. Book	6½	@	7
No. 1 S. & S. C. Book	7	@	7½
Coated Book	8½	@	8.60
Coated Label	8¼	@	8.50
News—Rolls mill	4	@	4½
News—Sheets, mill	4½	@	4¾
No. 1 Manila	4¾	@	6
No. 1 Fiber	5¼	@	5¾
No. 2 Manila	4½	@	5
Butchers' Manila	4	@	4½
No. 1 Kraft	7	@	7½
No. 2 Kraft	6½	@	7
Wood Tag Boards	4½	@	5
Screenings	3	@	4
Boards, per ton— Plain Chip, Solid News, Manila Lined Chip	All quotations withdrawn		
Container Line— 85 Test, 100 Test			

Old Papers

Shavings—			
No. 1 Hard White	4.25	@	4.50
No. 1 Soft Shav.	3.75	@	4.00
No. 1 Mixed	1.85	@	2.00
No. 2 Mixed	1.75	@	1.90
White Envel. Cuttings	4.25	@	4.50
Ledgers and Writings	2.75	@	3.00
Solid Books	2.55	@	2.65
No. 1 Books, light	2.00	@	2.25
Blanks	2.00	@	2.25
Ex. No. 1 Manila	2.40	@	2.60
Manila Envelope Cuttings	2.50	@	2.65
No. 1 Manilas	1.75	@	2.00
Folders News (over issue)	1.40	@	1.50
Old Newspaper	1.35	@	1.45
Mixed Papers	1.25	@	1.50
Straw Clippings	1.25	@	1.50
Binders Clippings	1.25	@	1.50
Kraft	2.40	@	2.60
New Kraft Cuts	2.50	@	2.60
Roofing Stock, f. o. b. Chicago, Net Cash—			
No. 1	32.00	@	—
No. 2	30.00	@	—
No. 3	28.00	@	—
No. 4	28.00	@	—

PHILADELPHIA

[FROM OUR REGULAR CORRESPONDENT]

Paper

Bonds	.10	@	.60
Ledgers	.15	@	.40
Writings—			
Superfine	.15	@	.20
Extra fine	.12	@	.22
Fine	.20	@	.30
Fine, No. 2	.20	@	.25
Fine, No. 3	.15	@	.20
Book, M. F.	.06	@	.09
Book, S. S. & C.	.08	@	.15
Book, Coated	.08	@	.15
Coated Lithograph	.10	@	.15
Label	.08	@	.15
News	.05	@	.07
No. 1 Jute Manila	.12	@	.13
Manila Sul., No. 1	.08	@	.08½
Manila No. 2	.07½	@	.08
No. 2 Kraft	—	@	.08½
No. 1 Kraft	—	@	.09½
Common Bogus	.02½	@	.03
Straw Board	67.50	@	70.00
News Board	58.00	@	
Chip Board	58.00	@	
Wood Pulp Board (Carload Lots)	1.20	@	1.25
Binder Boards—			
Per ton	80.00	@	
Carload lots	80.00	@	
Tarred Felts—			
Regular	48.00	@	50.00
Slaters	54.00	@	56.00
Best Tarred, 1-ply (per roll)	1.35	@	1.50
Best Tarred, 2-ply (per roll)	1.00	@	1.15
Best Tarred, 3-ply	1.50	@	1.65

Bagging

F. o. b. Phila.

Gunny No. 1—			
Foreign	1.10	@	
Domestic	1.10	@	
Manila Rope	5.25	@	5.75
Sisal Rope	.75	@	.80
Mixed Rope	.75	@	.80
Scrap Burlaps	1.00	@	1.25
Wool Tares, heavy	2.50	@	2.75
Mixed Strings	.75	@	.80
No. 1, New Lt. Burlap	1.75	@	2.00
New Burlap Cuttings	1.75	@	2.10

Old Papers

F. o. b. Phila.

Shavings—			
No. 1, Hard White	4.00	@	4.25
No. 2, Hard White	3.50	@	3.75
No. 1 Soft White	3.60	@	3.75
No. 2 Soft White	2.00	@	2.25
No. 1 Mixed	1.50	@	1.75
No. 2 Mixed	1.00	@	1.25

(Continued on page 74)

XUM

Imports and Exports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING NOVEMBER 25, 1922

Cigarette paper .....241 cs.
Hangings .....49 bls., 6 cs.
Wall paper .....207 bls.
Filter paper .....98 cs.
Drawing paper .....6 cs.
Surface Coated Paper.....122 cs.
Wrapping paper.....691 bls., 962 rolls, 202 bdls.
Packing paper .....48 bdls.
Photo paper .....2 cs.
Parchment paper .....12 cs.
Tissue paper .....11 cs.
Printing paper.....82 cs., 67 rolls
Miscellaneous paper...9,752 rolls, 1,221 bls., 12 cs.

CIGARETTE PAPER

British-American Tobacco Company, Baltic, Liverpool, 17 cs.
Kaufmann Brothers & Bondy, Niagara, Bordeaux, 14 cs.
Rose & Frank, Pipestone County, Havre, 50 cs.
American Tobacco Company, Pipestone County, Bordeaux, 160 cs.

PAPER HANGINGS

A. C. Dodman, Jr., Baltic, Liverpool, 3 cs., 44 bls.
W. H. S. Lloyd & Co., Port Albany, London, 5 bls., 3 cs.

WALL PAPER

A. C. Dodman, Jr., Zeeland, Antwerp, 9 bls.
Guaranty Trust Company, Birmendyk, Rotterdam, 796 bls.
A. Murphy & Co., Mauretania, Liverpool, 2 bls.

FILTER PAPER

H. Reeve, Angel & Co., Mauretania, Liverpool, 7 cs.
E. Fougera & Co., Niagara, Bordeaux, 40 cs.
E. Fougera & Co., Canopic, Bordeaux, 40 cs.
H. Reeve, Angel & Co., Port Albany, London, 11 cs.

DRAWING PAPER

H. Reeve, Angel & Co., Port Albany, London, 6 cs.

SURFACE COATED PAPER

L. A. Cousmiller, Binnendyk, Rotterdam, 122 cs.

WRAPPING PAPER

C. Steiner, Hannoner, Bremen, 35 bls.
M. O'Meara Company, Orduna, Hamburg, 277 bls.
Chemical National Bank, by same, 962 rolls.
M. O'Meara Company, Manchuria, Hamburg, 379 bls.
Blauvelt, Wiley Paper Manufacturing Company, Assyria, Glasgow, 202 bdls.

PACKING PAPER

Irving National Bank, Nervier, Antwerp, 48 bls.

PHOTO PAPER

J. J. Gavin, Scythia, Liverpool, 2 cs.

PARCHMENT PAPER

T. C. Strype, Zeeland, Antwerp, 12 cs.

TISSUE PAPER

T. C. Strype, Baltic, Liverpool, 11 cs.

PRINTING PAPER

Herman Lips, Zeeland, Antwerp, 82 cs.
Irving National Bank, Manchuria, Hamburg, 67 rolls.

PAPER

Hugh Camon, Hannoner, Bremen, 72 rolls, 12 bls.
Equitable Trust Company, by same, 2,591 rolls.
Irving National Bank, by same, 4,958 rolls, 784 bls.
Republic Rag and Paper Company, Orduna, Hamburg, 845 rolls.
Hensel, Bruckman & Lorbacher, by same, 3 cs.
F. L. Kraemar & Co., Pres. Monroe, London, 9 cs.
M. Walsh, Hellig Olav, Copenhagen, 56 bls.
National City Bank, by same, 963 rolls.
National City Bank, Manchuria, Hamburg, 320 bls.
Equitable Trust Company Saxonia, Hamburg, 49 bls.
Irving National Bank, Saxonia, Hamburg, 323 rolls.

RAGS, BAGGINGS, ETC.

Irving National Bank, Zeeland, Antwerp, 214 bls. flax waste.
W. D. Lane & Co., Belgian, Manchester, 17 bls. cotton waste.
Paper Board Corporation of Towanda, by same, 144 bls. waste paper.
Brown Bros. & Co., by same, 69 bls. waste paper.
Equitable Trust Company, by same, 63 bls. waste paper, 146 bls. bagging.
L. H. Abenheimer, by same, 123 bls. bagging.
Ashworth Speakman & Co., by same, 207 bags hide cuttings.
E. Butterworth & Co., Inc., by same, 71 bls. paper stock.
S. Silberman, by same, 52 bls. rags.
Irving National Bank, H. Olav, Copenhagen, 51 bls. rags.
Irving National Bank, Pres. Monroe, London, 130 bls. rags.
Katzenstein & Keene, Inc., Niagara, Bordeaux, 243 bls. rags.
E. J. Keller Company, Inc., by same, 342 bls. rags.
American Exchange National Bank, Canopic, Bremen, 94 bls. rags.
American Exchange National Bank, Saxonia, Hamburg, 416 bls. rags.
M. O'Meara Company, Saxonia, Hamburg, 81 bls. new cuttings.
Equitable Trust Company, Post Albany, London, 122 bls. waste paper.
Equitable Trust Company, Assyria, Glasgow, 18 bls. paper stock, 158 bls. rags.
Castle, Gottheil & Overton, Rochambeau, Havre, 256 bls. rags.
J. J. Ryan & Sons, Binnendyk, Rotterdam, 55 bls. cotton waste.
S. Silberman, by same, 1,151 bls. shopperies.
W. Hughes, by same, 87 bls. cotton waste.
E. J. Keller Company, Inc., by same, 82 bls. rags.
Irving National Bank, Nervier, Antwerp, 71 bls. new cuttings.
Equitable Trust Company, by same, 650 bls. rags.
E. J. Keller Company, Inc., by same, 527 bls. rags, 210 bls. flax waste.
Irving National Bank, by same, 625 bls. flax waste.
Brown Bros. & Co., Nervier, Havre, 118 bls. rags.
Goldman, Sachs & Co., by same, 937 bls rags.
E. J. Keller Company, Inc., by same, 434 bls. rags.
W. Schall & Co., by same, 227 bls. rags.
Ladenburg, Thalman & Co., by same, 965 bls. rags, 134 bls. new cuttings.
American Express Company, Anaconda, Antwerp, 172 bls. rags.
American Woodpulp Corporation, by same, 262 bls. rags.
E. Butterworth & Co., Inc., by same, 252 bls. bagging.
S. Silberman, by same, 119 bls. new cuttings.
I. M. Jaffe Bros., by same, 324 bls. rags.
W. Hughes, by same, 57 bls. rags.
Castle, Gottheil & Overton, by same, 61 bls. bagging.
E. J. Keller Company, Inc., by same, 476 bls. bagging.
Brown Bros. & Co., by same, 652 bls. rags.
American Exchange National Bank, by same, 5 bls. rags.
D. J. Murphy & Co., by same, 86 bls. rags.
E. J. Keller Company, Inc., Hansa, Hamburg, 2 bls. rags.
Castle, Gottheil & Overton, Binnendyk, Rotterdam, 24 bls. rags.

OLD ROPE

International Purchasing Company, Zeeland, Antwerp, 156 coils.
N. E. Bergen, Orizaba, Havana, 17 coils.
American Exchange National Bank, Canopic, Bremen, 455 bales.
American Exchange National Bank, Binnendyk, Rotterdam, 22 coils.
Brown Bros. & Co., by same, 207 coils.
Equitable Trust Company, Nervier, Antwerp, 34 coils.
M. O'Meara Company, Anaconda, Antwerp, 49 coils.

WOOD PULP

Bulkley Dunton & Co., Hannoner, Bremen, 375 bls.
E. J. Keller Company, Inc., Hannoner, Gefle, 1,326 bls.
E. J. Keller Company, Inc., Hannoner, Essvik, 1,000 bls.
H. Hollesen, Hannoner, Bremen, 150 bls.
E. Butterworth & Co., Inc., H. Olav, Copenhagen, 12 bls.
M. Gottesman & Co., Inc., Binnendyk, Rotterdam, 470 bls.
Castle, Gottheil & Overton, by same, 566 bls.

WOOD FLOUR

Innis, Spieden & Co., Saxonia, Hamburg, 920 bags.

BALTIMORE IMPORTS

WEEK ENDING NOVEMBER 25, 1922.

Katzenstein & Keene, Inc., Virgilia, London, 169 bls. old rope.
Furness, Withy & Co., Binnendyk, Rotterdam, 89 bls. old rope.
Union Trust Company, by same, 68 bls. old rope.
Parsons & Whittemore, by same, 200 bls. rags.
American Exchange National Bank, by same, 478 bls. shopperies.
Irving National Bank, by same, 500 bls. straw pulp.

NEW ORLEANS IMPORTS

WEEK ENDING NOVEMBER 25, 1922.

Castle, Gottheil & Overton, Mosella, London, 412 bls. waste paper, 416 bls. rags.
E. J. Keller Company, Inc., J. Cartier, Rouen, 265 bls. bagging.

BOSTON IMPORTS

WEEK ENDING NOVEMBER 25, 1922.

G. M. Ganer, Binnendyk, Rotterdam, 42 bls. rags.
Castle, Gottheil & Overton, West Zeda, London, 76 bls. waste paper.
M. Gottesman & Co., Inc., Arkansas, Trondhjem, 1,200 bls. wood pulp.
M. Gottesman & Co., Inc., Mexicano, Trondhjem, 600 bls. wood pulp.
M. Gottesman & Co., Inc., Mexicano, Christiania, 1,700 bls. wood pulp.
R. F. Hammond, W. Loquessack, Gothenburg, 500 bls. wood pulp, 100 tons.

PHILADELPHIA IMPORTS

WEEK ENDING NOVEMBER 25, 1922.

M. Gottesman & Co., Inc., Emden, Hamburg, 1,250 bls. wood pulp.
Castle, Gottheil & Overton, West Zeda, London, 278 bls. waste paper.
Castle, Gottheil & Overton, West Lake, Liverpool, 79 bls. waste paper.
Castle, Gottheil & Overton, Bristol City, Bristol, 435 bls. wastet paper.
Castle, Gottheil & Overton, Altair, Bremen, 435 bls. rags.
E. J. Keller Co., Inc., Emden, Hamburg, 836 bls. rags, 8 bls. jute cuttings.
Katzenstein & Keene, Inc., Virgilia, London, 178 bls. rags.
Katzenstein & Keene, Inc., Edgehill, Rotterdam, 280 bls. rags.
Castle, Gottheil & Overton, Pipestone County, Havre, 160 bls. rags.
Castle, Gottheil & Overton, Anaconda, Antwerp, 523 bls. rags.
American Woodpulp Corporation, by same, 209 bls. rags.
E. J. Keller Company, Inc., by same, 1,169 bls. rags, 33 bls. bagging.
S. Silberman, by same, 104 bls. rags.
G. Soelle & Co., by same, 268 bls. rags.
S. Birkenstein & Sons, by same, 235 bls. rags.

GALVESTON IMPORTS

WEEK ENDING NOVEMBER 25, 1922

E. J. Keller Company, Inc., Westacook, Rotterdam, 168 bls.. rags.

CHARLESTON IMPORTS

WEEK ENDING NOVEMBER 25, 1922.

Castle, Gottheil & Overton, Salvation Lass, Barcelona, 1,171 bls. bagging.

XUM

TAYLOR, BATES & CO.

Members New York Stock Exchange
Members New York Cotton Exchange

100 Broadway, New York
Tel. Rector 1140

BONDS STOCKS COTTON	Bought and Sold on Commission

BRANCH OFFICE
41 EAST 42nd STREET
Tel. Murray Hill 5631

Swedish M. G. and Unglazed Kraft Paper No. 1

of Frovifors' excellent quality

We have tonnage available for January, February or March shipments from Gothenburg.

Lowest Market Price

We will be very glad to send you samples and quotation.

FERNSTROM PAPER CO., Inc.

Scandinavian Paper Mills' Representatives
150 Nassau Street New York City

The B Co INC

Quality: *It means more than price*

PULPS

"Hafslund Bear" "Forshaga"
BLEACHED SULPHITE

"Klarafors"
EASY BLEACHING SULPHITE

STRONG UNBLEACHED SULPHITE

"Hurum" "Bamble"
EXTRA STRONG KRAFT; BLEACHED AND BLEACHABLE SULPHATE

"Edsvalla" 50% MOIST "Dejefors" DRY
WHITE SPRUCE—GROUND WOOD

Tonnage available on dock for prompt shipment

THE BORREGAARD CO., INC.

200 FIFTH AVENUE NEW YORK CITY

Whalen Sulphite Pulps

Made from the SITKA SPRUCE of BRITISH COLUMBIA. Noted for Fibre, Color and strength.

SNOWHITE BLEACHED SULPHITE
GLACIER EASY BLEACHING SULPHITE
SWAN STRONG SULPHITE

As exclusive selling agents for the Whalen Pulp & Paper Mills, Ltd., we solicit your inquiries to any of our offices.

Canadian Robert Dollar Co.

LIMITED

VANCOUVER, B. C.

U. S. ADDRESSES

Robert Dollar Co., Robert Dollar Bldg., San Francisco
Robert Dollar Co., 15 Moore Street, New York, N. Y.
Robert Dollar Co., Harris Trust Bldg., Chicago, Ill.
Robert Dollar Co., L. C. Smith Bldg., Seattle, Wash.

XUM

Miscellaneous Markets

OFFICE OF THE PAPER TRADE JOURNAL,
TUESDAY, NOVEMBER 28, 1922.

BLEACHING POWDER.—Bleach prices have remained fairly constant, an average of 2.00 cents a pound being maintained for spot shipment. Raw material scarcity is still a considerable factor with which to reckon in bleach production. Demand continues strong from the paper manufacturing trade.

BLANC FIXE.—As with other chemicals, blanc fixe supplies have been hampered in their movement due to the railroad embargoes. The quoted price of $80 to $85 per ton, works still rules.

CAUSTIC SODA.—Produced in irregular amounts and holding in the strong demand of the paper manufacturing business, caustic, basis 60 per cent, continues to be listed at 2.50 cents a pound, works, on contract, with several outside brands shading this figure slightly.

CHINA CLAY.—The demand for both domestic and foreign grades of China clay is holding up strong, prices on the former ranging from $6 to $8.50 for the unwashed commodity and $8 to $11 for the washed. English and other imported clays continue to be quoted at $15 to $22, varying with the quality and size of shipment.

CASEIN.—Lacterine has again come into the limelight with the filing of another brief with the Tariff Commission advocating the reduction of the duty of 2½ cents a pound on this commodity. In submitting this memorandum it was stated that the coated paper mills of America are today faced with an enforced shutdown for the lack of this vital and essential raw material, for the following reasons: first, that the duty imposed has diverted the normal importations to foreign countries; and second, that the domestic production has not increased despite the protection offered. Current quotations on casein range from 15.50 to 17.00 cents a pound, and the market is firm.

PAPERMAKERS' GLUE.—Listed at 13 to 20 cents a pound, works, hide glue for use in tub sizing has been moving to papermakers in regular amounts.

LIQUID CHLORINE.—Chlorine shipments have been fairly regular despite transportation and lighterage hazards, the quoted price of 5.00 to 6.00 cents a pound being firmly maintained by a consistent demand from paper manufacturers.

ROSIN.—Grades E, F, and G, of rosin in barrels of 280-pounds have ranged in price from 6.80 to 7.00 cents a pound during the past week, prices tending to fluctuate considerably.

SALTCAKE.—Practically no prospects of greatly ameliorated production conditions are in sight in the saltcake market, one producer stating during the past week that the only way he could fill his contracts would be to buy the commodity from someone else. The extremely low acid prices have greatly retarded production, as have the scarcity of crude salt and nitre cake. Chrome cake is still quoted at $22 to $25 on contract and $26 on spot lots, while acid cake reaches $28 and $29.

SULPHUR.—Brimstone has been held in strong demand by the paper manufacturing trade, the second largest purchaser of sulphur as a raw commodity. Production has been increasing steadily, and prices have held very firm at $18 to $20 per ton.

STARCH.—Quoted in the neighborhood of 2.62 cents a pound in bag lots and 2.90 cents in barrels, powdered starch has continued active, as has the papermakers' grade at 2.72 and 3.00 cents for the respective packings.

SULPHATE OF ALUMINA.—The fact that the potential production of the American chemical industry is nearly twice as much as the country can use at present may in part account for the keen competition which has been prevalent in the alum market. With prices relatively low at 1.50 to 1.75 for commercial sulphate in the East and 1.25 to 1.35 in the West, any effort to boost prices would merely result in a shifting of business.

Market Quotations

(*Continued from page 71*)

Solid Ledger Stock.	2.25	@	2.50
Writing Paper.....	2.00	@	2.25
No. 1 Books, heavy.	2.25	@	2.50
No. 2 Books, light.	1.40	@	1.50
No 1 New Manila.	2.75	@	3.00
No 1 Old Manila..	1.50	@	1.75
Container Manila,..	1.35	@	1.40
Old Kraft.....	2.25	@	2.50
Overissue News....	150	@	1.60
Old Newspaper....	1.20	@	1.25
No. 1 Mixed Paper.	1.10	@	1.15
Common Paper....	.80	@	.90
Straw Board, Chip.	.80	@	.90
Binders Bd'. Chip..	.80	@	.90
Domestic Rags—New. Price to Mill, f. o. b. Phila.			
Shirt Cuttings—			
New White, No. 1.	11¼	@	.11¾
New White, No. 2	.06	@	
Silicias, No 1....	.06½	@	.07
New unbleached..	.10¼	@	
Washables	.03¾	@	
Fancy	04¾	@	.05¾
Cottons—according to grades—			
Blue Overall....	.05½	@	.05¾
New Blue.....	.02¾	@	.02¾
New Black Soft.	.06¼	@	.06½
New Light Seconds	.02¾	@	.02¾
Khaki Cuttings..	.03½	@	.04¼
Corduroy	.03¼	@	.03¾
New Canvass....	.07½	@	.08
New Black Mixed	.04	@	
Old White, No. 1—			
Repacked	.06	@	.06½
Miscellaneous ...	.04½	@	.04¾
White, No. 2—			
Repacked	.03	@	.03½
Miscellaneous ...	.03	@	.03¼
Thirds and Blues—			
Repackeed	200	@	2.25
Miscellaneous ...	1.85	@	1.90
Black Stockings....	2.75	@	3.00
Roofing Stock—			
No. 1.....	1.30	@	1.35
No 2.....	1.20	@	1.25
No 3.....	1.10	@	1.15
No. 4.....	110	@	1.15
No. 5A.....	1.05	@	110
B.....			nominal
C.....			nominal

BOSTON

[FROM OUR REGULAR CORRESPONDENT]

Paper

Bonds	.08	@	.50
Ledgers	.08½	@	.55
Writings	.08	@	.42
Superfine	.16	@	.26
Fine	.15	@	.18
Books, S. & S. C..	.07¼	@	.12
Books, M. F.....	.06¾	@	.09½
Books, coated	.09	@	.15
Label	.08½	@	.13
News, sheets	4.75	@	6.00
News, rolls	4.50	@	5.75
Manilas—			
No. 1 Manila...	$6.00	@	7.00
No. 1 Fiber ...	.06½	@	.07
No. 1 Jute	9.00	@	10.50
Kraft Wrapping ..	.07	@	
Common Bogus ...	3.50	@	3.85

Boards

(Per Ton Destination)

Chip	$60.00	@	65.00
News, Vat Lined..	62.50	@	65.00
Wood, Vat Lined..	70.00	@	
Filled News Board..	62.50	@	65.00
Solid News Board..	65.00	@	70.00
S. Manila Chip..	72.50	@	75.00
Pat. Coated	85.00	@	92.50

Old Papers

Shavings—			
No. 1 Hard White	4.25	@	4.50
No. 1 Soft White	3.00	@	3.50
No. 1 Mixed.....	1.25	@	1.50
Ledgers & Writings	1.75	@	2.00
Solid Books	2.50	@	2.75
Blanks	1.70	@	1.80
No. 2 Light Books.	1.75	@	1.90
Folded News, over-issues	28.00	@	30.00
Gunny Bagging	.85	@	.90
Manila Rope.....	5.75	@	6.00
Common Paper	.70	@	.80
Old News	.80	@	.90
Old Kraft	2.00	@	2.10

TORONTO

[FROM OUR REGULAR CORRESPONDENT]

Paper

(Mill Prices to Jobbers f. o. b. Mill)

Bond—			
Sulphite	.11	@	.12½
Light tinted.....	.12	@	.13½
Dark tinted.....	.13½	@	.15
Ledgers (sulphite).	—	@	.13
Writing	.09½	@	.12
News, f. o. b. Mills—			
Rolls (carloads)..	3.50	@	
Sheets (carloads)..	—	@	4.25
Sheets (2 tons or over)	—	@	4.50
Book—			
No. 1 M. F. (carloads)	9.00	@	—
No. 2 M. F. (carloads)	8.00	@	—
No. 3 M. F. (carloads)	7.50	@	—
No. 1 S. C. (carloads)	9.50	@	—
No. 2 S. C. (carloads)	8.50	@	—
No. 1 Coated and litho.	14.00	@	—
No. 2 Coated and litho.	13.00	@	—
No. 3 Coated and litho.	12.25	@	—
Coated and litho., colored	14.25	@	—
Wrapping—			
Grey	4.75	@	—
White Wrap.....	5.50	@	—
"B" Manila.....	5.75	@	—
No. 1 Manila ..	6.75	@	—
Fiber	6.75	@	—
Kraft, M. F.	8.00	@	—
M. G.	8.15	@	—

Pulp

(F. o. b. Mill)

Ground wood ...	$35.00	@	40.00
Sulphite easy bleaching	60.00	@	70.00
Sulphite news grade.	55.00	@	60.00
Sulphite, bleached.	100.00	@	105.00
Sulphate	70.00	@	—

Old Waste Papers

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut..	4.00	@	—
Soft White Book Shavings	3.75	@	
White Bl'k News	2.10	@	—
Book and Ledger—			
Flat Magazine and Book Stock(old)	2.55	@	
Light and Crumpled Book Stock	2.40	@	
Ledgers and Writings	2.75	@	
Solid Ledgers....	2.75	@	
Manilas—			
New Manila Cut.	2.10	@	—
Printed Manilas..	1.75	@	—
Kraft	2.50	@	—
News and Scrap—			
Strictly Overissue	1.50	@	
Folded News....	1.50	@	
No. 1 Mixed Papers	1.20	@	
Domestic Rags— Price to mills, f. o. b. Toronto			Per lb.
No. 1 White shirt cuttings	.10¼	@	
No. 2 White shirt cuttings	.05	@	
Fancy shirt cuttings	.05½	@	
No. 1 Old whites	.04	@	—
Thirds and blues	.02	@	
			Per cwt.
Black stockings...	2.00	@	
Roofing stock:			
No. 1	1.50	@	
No. 2	1.05	@	
Roofing stock:			
Manila rope.....	6.10	@	
No. 2.....	1.50	@	
Gunny bagging.....	1.00	@	

XUM

The Home of Quality

FACTORY
132ND TO 133RD ST & BROOK AVE

PAPER BAGS

Sacks and Specialties

ESTABLISHED 1901

SCHORSCH & CO.

Manufacturers

500 East 133d Street : New York

This Registered Trade Mark Octagon

on a Paper Bag Vouches for Its Good Quality

The Union Sulphur Company

Producers of the Highest Grade Brimstone on the market . .

ABSOLUTELY FREE FROM ARSENIC OR SELENIUM

The Largest Sulphur Mine in the World

CALCASIEU PARISH, LOUISIANA

Main Offices: Frasch Building, 33 Rector Street, New York

COLORS FOR PAPERMAKERS

KUTTROFF, PICKHARDT & CO.
INCORPORATED

128 Duane Street - - New York

BOSTON - 157 Federal St. PHILA. - 111 Arch St.
PROV. - 52 Exchange Pl. CHI. - 305 W. Randolph St.

Clay

300 Tons daily

Entire production of a group of mines under one management insures uniformity in quality and minimum production costs.

Let us submit samples and quote you.

AMERICAN MADE FOR AMERICAN TRADE

THE MINERAL EDGAR CO.

110 William Street
New York

English China Clays
ECCO CLAYS
Sales Corporation

33 WEST 42ND ST., NEW YORK

Ecco Clays 500,000 Tons Annually

DELIVERIES FROM PRODUCER INSURE AND ENABLE YOU TO PRODUCE UNIFORM PAPER

Highest Grades Filler and Coating Clays

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WANT AND FOR SALE ADVERTISEMENTS

CLASSIFIED RATES

Minimum rate for advertisements of 25 words or less, first insertion, $1.00.

SITUATION WANTED, 4 cents a word for first insertion and 2 cents a word for each subsequent insertion of same ad. No ad of less than 25 words accepted.

HELP AND MISCELLANEOUS WANTS, and small For Sale Ads, 4 cents a word for each and every insertion. No ad of less than 25 words accepted.

When answering advertisements, please address the Box Number given in ad.

Answers can be forwarded care Paper Trade Journal, and will be promptly forwarded without extra charge. All should be sent to the New York office, 10 East 39th street. And all should be addressed as the advertisement directs in every case and not simply to the paper.

All classified ads for the current issue must be in hand not later than Monday preceding date of publication.

HELP WANTED

WANTED—One Machine Tender, one Backtender, one Beaterman on Fourdrinier Machine making book papers. Good locality. Steady employment. Address, Box 5599, care Paper Trade Journal. N-30

KRAFT PULP FOREMAN—Tour Foreman for sixty ton Kraft Pulp Mill in Middle West. Immediate opening. Give full particulars in first letter. Address, Box 5601, care Paper Trade Journal. N-30

WANTED—One first class Kraft Beater Engineer. Busy job. Good wages, short hours, finest climate in the world. Address, Box 5604, care Paper Trade Journal. N-30

WANTED—First class Millwright. Must be steady, not afraid of heavy work, and capable of caring for all repairs and setting of new machinery in Cylinder Mill. Address, with references and wages expected, the Beveridge Paper Company, Indianapolis, Indiana. N-30

SALESMAN WANTED with Established Trade in paper, paper boards or twine in or adjacent to New York City. Address, Great Notch Paper Co., Inc., 101-103 Varick Street, New York. D-14

WANTED—A man to sell beater engine roll bars and bed plates, also machine knives to paper mills. State experience and salary desired, and give references. Address, Box 5623, care Paper Trade Journal. D-7

WANTED—Two Fourdrinier machine tenders, two back tenders, two third hands for new two tour mill. Married men preferred. Address, Box 5624, care Paper Trade Journal. N-30

WANTED—First class all around Finisher. Experienced on all styles of finishing better grades of paper, also on trimming press. None but steady, sober man need apply. Address, Box 5618, care Paper Trade Journal. N-30

SALESMAN WANTED—A fast growing Coated Paper and Specialty House, requires one or two salesmen, who have a following in New York City selling Bonds, Offset, Super, Coated, M/F. Boards, etc. Can have unrestricted territory. Drawing account against liberal commission. Address, Box 5640, care Paper Trade Journal. D-7

WANTED—First class Boss Beaterman; also Machine Tender, for Mill making high grade Box Boards. Good wages. Mill in ideal location. State experience and send references. Address, Box 5641, care Paper Trade Journal. D-14

SALESMAN WANTED—Salesman with experience in selling Waterproof Wrapping Paper to handle that line for a going concern. Address, Box 5642, care Paper Trade Journal. D-21

NOTICE

When replying to advertisements which have a BOX NUMBER always make certain you have the correct **Box Number** on the address. This will insure your letter being sent to the right advertiser.

HELP WANTED

WANTED—Two (2) experienced adjusters, on Automatic Paper Bag Machines, those having operated "Stillwell" Machines preferred. State experience, references, married or single, and salary expected in first letter. Address, Box 5643, care Paper Trade Journal. D-21

WANTED—Harper and Cylinder machine tenders, making all high grade Waxing Papers. Eight hour shifts. Mill located in New York State. Only men able to produce quality and keep up machine need apply. Address, Box 5645, care Paper Trade Journal. D-7

WANTED—First class Backtender 86" Fourdrinier making Kraft. Mill in Massachusetts. None but steady man considered. State experience and particulars in first letter. Address, Box 5646, care Paper Trade Journal. D-7

WANTED—Young man with selling experience familiar with paper mills to sell Fourdrinier Wires and some other Materials. Address, Box 5647, care Paper Trade Journal. N-30

WANTED—Three experienced calender men and one winderman. Reply giving references. Address, Box 5648, care Paper Trade Journal. N-30

ADJUSTER WANTED—Must have experience on Smithe's Machines. Apply American Envelope Co., 297 Congress, Boston, Massachusetts. N-30

WANTED—First class machine tender to run a 96" machine making Light Weight Board. 8 hour day and steady work to right man. Mill located in Middle West. Address, Box 5657, care Paper Trade Journal. N-30

WANTED—For prominent Paper and Toilet Manufacturing Concern in New England State, experienced and competent foreman for Converting Department familiar with all grades. Address, Box 5644, care Paper Trade Journal. N-30

WANTED—Beaterman, Engineer, Machine Tender, Backtender and Winderman for Mill located in East. Fourdrinier Machine. Three tours. Will pay good wages. No trouble. Give references in first letter. Address, Box 5595, care Paper Trade Journal. D-7

PAPER SALESMAN—Energetic, ambitious salesman having good knowledge of Wrapping Papers wanted by large established New York firm. Must be acquainted with converters, large consumers. State age, experience, remuneration expected. Confidential. Address, Box 5597, care Paper Trade Journal. N-30

SITUATIONS WANTED

A MAN OF EXPERIENCE, capable of assuming management, or other executive's position, would like connection with Mill where Investment can be made. Address, Box 5587, care Paper Trade Journal. D-7

SITUATIONS WANTED

YOUNG LADY, 22, holding position at present as bookkeeper and general office manager with a well known retail paper and bag concern. Has been with them for the past five years, but desires to make a change with larger concern. Unquestionable references as to ability and general knowledge of retail paper line. Address, Box 5484, care Paper Trade Journal. D-7

BOSS FINISHER; thoroughly experienced on all grades of paper, having had several years' experience as Boss Finisher, also charge of cutters and calenders. Best of references furnished. Address, Box 5572, care Paper Trade Journal. N-30

PAPER SALESMAN: New York City, who can produce large amount of business, would like connection with Paper House, or organization, having good mill facilities. Drawing account on commission basis. Address, Box 5596, care Paper Trade Journal. tf.

A MAN of experience in Traffic Department Paper Mill desires position. Address, Box 5586, care Paper Trade Journal. D-7

EXPERIENCED BUYER for paper mill, open for engagement. Address, Box 5585, care Paper Trade Journal. D-7

WANTED—Twelve years' experience in Commercial, Construction, Pulp and Paper Accounting and Auditing. Age 34 years. Desires position in Canada or East. Anxious to change for position with better prospects. Highest references. Address, Box 5626, care Paper Trade Journal. N-30

MANAGER: Superintendent of ability, 40 years of age, ten years as manager and superintendent. Practical in all branches of mill. Best of references, wishes connections with good container or box board mill after January 1st. Address, Box 5627, care Paper Trade Journal. D-7

MASTER MECHANIC with twelve years' experience in papers. A first class machinist and millwright and up in all mill repairs. Can handle men and is not afraid of work. References. Address, Box 5628, care Paper Trade Journal. D-7

CHEMIST AND CHEMICAL ENGINEER with previous experience in Sulphite and Paper Mills, is open for engagement. Now employed. Good references. Address, Box 5475, care Paper Trade Journal. D-7

SUPERINTENDENT of ability desires to make a change. Experienced on all grades of fine Papers, Bond, Ledger, Book, Kraft, Waxing, Manilas, and other Grades. Address, Box 5547, care Paper Trade Journal. D-21

BOOKKEEPER, office man or inside salesman. Position desired by man long experienced in the Paper and Publishers Line. References. Address, Box 5609, care Paper Trade Journal. N-30

SUPERINTENDENT open for position. 20 years' experience in the manufacture of all the better grades of combination and container board. Can get quality and production. Thoroughly familiar with repairs, maintenance and operation of every department of mill. Can furnish the very best of references. Address, Box 5611, care Paper Trade Journal. D-7

MECHANICAL SUPERINTENDENT or master mechanic open for position. Twenty years' experience. Can furnish best of references. American, thirty-nine years old and married. Can handle help and get results. Address, Box 5612, care Paper Trade Journal. N-30

CAPABLE EXECUTIVE, 8 years' experience, at present located, would like connection with progressive Mill where honest effort and results would be appreciated. Fully conversant with manufacturing and marketing all grades. A-1 references. Address, Box 5649, care Paper Trade Journal. N-30

XUM

SITUATIONS WANTED

WANTED—Man with executive ability desires position as mill manager. Knows the manufacturing details as well as accounting and office supervision. Address, Box 5632, care Paper Trade Journal. N-30

SITUATION WANTED—Salesman, 37 years of age and married. Seventeen years' experience selling retail trade Coarse and Fine Papers. Will work up any territory and put on paying basis in short time. Territory in low attitude preferred. Address, Box 5650, care Paper Trade Journal. N-30

WELL EDUCATED YOUNG MAN with 12 years' practical experience, wishes position as superintendent, assistant superintendent, or assistant manager with any reliable concern. Will go anywhere. Best of references furnished. Address, Box 5651, care Paper Trade Journal. D-21

YOUNG MAN would like position with manufacturer of paper. Sixteen years' office and selling experience with manufacturers and jobbers. Address, Box 5652, care Paper Trade Journal. N-30

WANTED—Position cylinder machine tender on Tissue and Light Weights. 15 years' experience. References. Address, Box 5653, care Paper Trade Journal. D-7

UP TO DATE SUPERINTENDENT open for position. Experienced on Manila, Fibre, Tissue, Book, Bond and Colors. Can give results. Address, Box 5654, care Paper Trade Journal. D-7

YOUNG MAN would like position as Office Manager or Assistant to General Manager. Has had seventeen years' office experience with two of the large paper mills in Maine. A-1 references. Address, Box 5655, care Paper Trade Journal. N-30

MAN, 32, actual experience installing Cost System, Payrolls, Distribution, Bookkeeping and all Paper Mill Office Details and Office Management, desires position. Excellent references. Salary secondary to advancement. Address, Box 5656, care Paper Trade Journal. D-7

WANTED—Mill connections for the sale of Paper and Paper Specialties on commission basis. Address, Ray C. Sheldon, Room 203, 170 Summer Street, Boston, Mass. N-30

POSITION WANTED by a party thoroughly experienced in the exporting of paper to Cuba, Mexico, South America, Japan, China and Australia and having an intimate knowledge extending over 20 years in the importing of all kinds of paper from England, France, Germany, Scandinavia and Finland together with a thorough knowledge of English and German and a working knowledge of French and Spanish. Location in this country no object. Address, Box 5619, care Paper Trade Journal. tf

FOR SALE

FOR SALE—Two Potdevin Glassine Bag Machines. Perfect condition. Price reasonable. Write for further information. Address, The Peerless Mfg. Co., Norristown, Pa. tf

FOR SALE—One super calender 66"-9 stack with motor drive. Outfit practically new and in first class condition. Latest type, a big bargain. Also 52" Wet paster. Address, Box 5634, care Paper Trade Journal. N-30

FOR SALE—6 Farnum Drives. Complete Triple-Deck frames for 44 Dryers. Will arrange terms to suit. Chesapeake Paper Board Co., Baltimore, Maryland. tf

FOR SALE—Deane Duplex Fire Pump, 14x 8½x10, capacity 600 gallons per minute. Address, Box 5482, care Paper Trade Journal. tf

FOR SALE

PAPER BUSINESS. New York City. Small concern, well established, ideal location, low rent, valuable lease. Splendid opportunity for salesman contemplating his own business. Correspondence confidential. Address, Box 5658, care Paper Trade Journal. N-30

FOR SALE—1—5" Pickering Governor, 10" flanges, with Dash Pot attached. 1—4" Pickering Governor, 9" flanges. 1—Speed change complete with pulleys 6" and 8". Address, Box 5659, care Paper Trade Journal. N-30

UNCAS PAPER MILL FOR SALE

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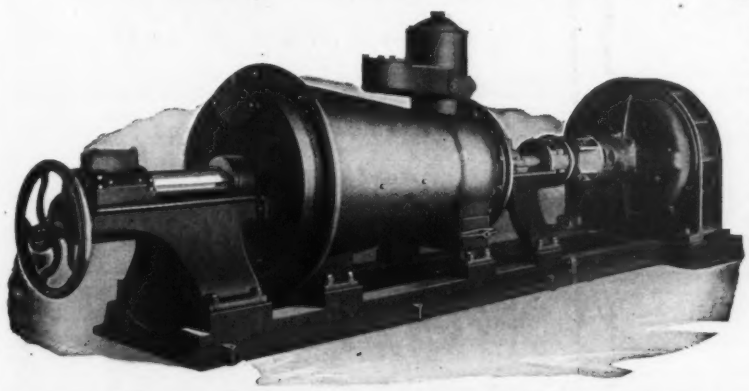

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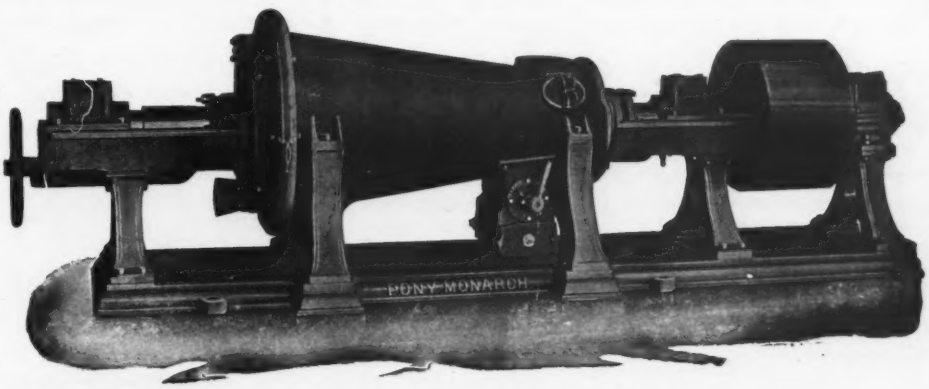

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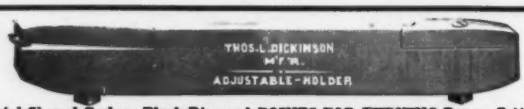

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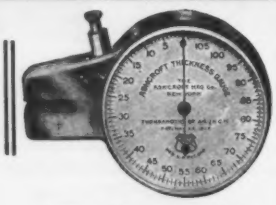
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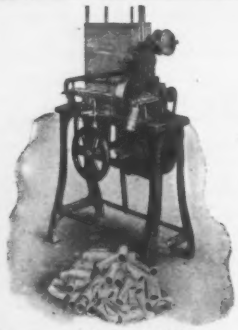
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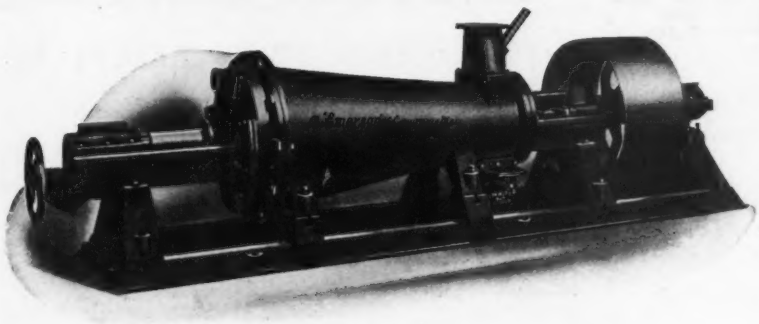

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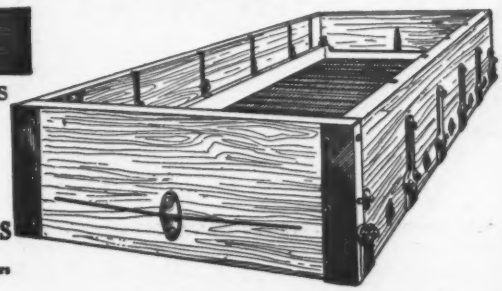

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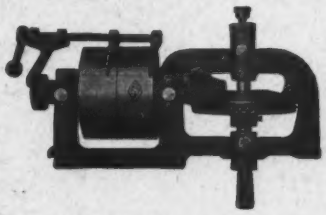

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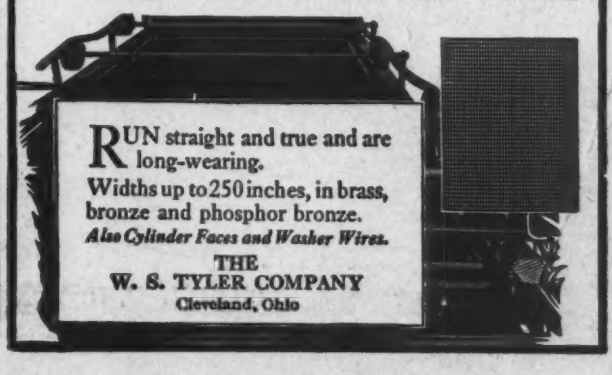

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